FINAL SPILL PREVENTION AND RESPONSE PLAN

VOLUME II OF II – PREVENTION, CONTROL, REPORTING, & TRAINING

NAVAL SUPPORT ACTIVITY, NAPLES ITALY

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Table of Contents

VOLUME II OF II – PREVENTION, CONTROL, REPORTING, & TRAINING I
TABLE OF CONTENTS I
LIST OF TABLES X
LIST OF FIGURES XI
LIST OF APPENDICES XII
LIST OF ACRONYMS XIII
RECORD OF NSA NAPLES, ITALY SPILL PREVENTION AND RESPONSE PLAN UPDATES AND CHANGES XVII

1.0 INTRODUCTION 1-1

1.1 GENERAL FACILITY INFORMATION 1-1
1.2 PLAN REQUIREMENT 1-3
1.3 CONTENT 1-3
1.4 IMPLEMENTATION, MAINTENANCE, & UPDATE REQUIREMENTS 1-5

2.0 PREVENTION & RESPONSE 2-1

2.1 GENERAL PREVENTION REQUIREMENTS 2-1
2.1.1 Storage Locations 2-1
2.1.2 Materials Compatibility 2-2
2.1.3 Container Management 2-2
2.1.4 Facility Management and Maintenance 2-3
2.1.5 Security 2-4
2.1.6 Inspections 2-5
2.1.7 Written Procedures 2-5
2.1.8 Oil and Hazardous Substances/Dangerous Waste Minimization 2-5
2.2 INVENTORY OF STORAGE, HANDLING, & TRANSFER SITES CAPABLE OF PRODUCING A SIGNIFICANT SPILL .. 2-6
2.2.1.1 Standard Hazardous Material Spill Response Procedures 2-7
2.3 CAPODICHINO 2-7
2.3.1 General Drainage Information 2-7
2.3.2 Capodichino POL Facilities 2-11
2.3.2.1 Aircraft Parking Apron 2-11
2.3.2.1.1 General Information 2-11
2.3.2.1.2 Spill Risks 2-11
2.3.2.1.3 Transfer 2-11
2.3.2.1.4 Containment and Safety Equipment 2-11
2.3.2.1.5 Drainage Control 2-11
2.3.2.1.6 Spill Response Strategies 2-11

2.3.2.1.7 Security 2-12
2.3.2.2 AST C-412 2-12
2.3.2.2.1 General Information 2-12
2.3.2.2.2 Spill Risk 2-12
2.3.2.2.3 Transfer 2-12
2.3.2.2.4 Containment and Safety Equipment 2-12
2.3.2.2.5 Drainage Control 2-12
2.3.2.2.6 Spill Response Strategies 2-12
2.3.2.2.7 Security 2-13
2.3.2.3 AST C-449 2-13
2.3.2.3.1 General Information 2-13
2.3.2.3.2 Spill Risk 2-13
2.3.2.3.3 Transfer 2-13
2.3.2.3.4 Containment and Safety Equipment 2-13
2.3.2.3.5 Drainage Control 2-13
2.3.2.3.6 Spill Response Strategies 2-13
2.3.2.3.7 Security 2-14
2.3.2.4 PWD Diesel Fuel Truck 2-14
2.3.2.4.1 General Information 2-14
2.3.2.4.2 Spill Risk 2-14
2.3.2.4.3 Transfer 2-14
2.3.2.4.4 Containment and Safety Equipment 2-14
2.3.2.4.5 Drainage Control 2-14
2.3.2.4.6 Spill Response Strategies 2-14
2.3.2.4.7 Security 2-15
2.3.2.5 Other Capodichino POL Storage Tanks 2-15
2.3.3 Capodichino Oil and Hazardous Substance and Dangerous Waste Storage Facilities 2-16
2.3.3.1 PW Environmental (TDW) Building 402A 2-16
2.3.3.1.1 General Information 2-16
2.3.3.1.2 Spill Risk 2-17
2.3.3.1.3 Transfer 2-17
2.3.3.1.4 Containment and Safety Equipment 2-17
2.3.3.1.5 Drainage Control 2-17
2.3.3.1.6 Spill Response Strategies 2-17
2.3.3.1.7 Security 2-17
2.3.3.2 DRMO (TDW) Building 402 2-17
2.3.3.2.1 General Information 2-17
2.3.3.2.2 Spill Risk 2-18
2.3.3.2.3 Transfer 2-18
2.3.3.2.4 Containment and Safety Equipment 2-18
2.3.3.2.5 Drainage Control 2-18

2.3.3.2.6 Spill Response Strategies 2-18
2.3.3.2.7 Security 2-18
2.3.3.3 CHRIMP (AP) Building 401 2-18
2.3.3.3.1 General Information 2-18
2.3.3.3.2 Spill Risk 2-19
2.3.3.3.3 Transfer 2-19
2.3.3.3.4 Containment and Safety Equipment 2-19
2.3.3.3.5 Drainage Control 2-19
2.3.3.3.6 Spill Response Strategies 2-19
2.3.3.3.7 Security 2-19
2.3.3.4 Public Works Transportation (AP) Building 407 2-19
2.3.3.4.1 General Information 2-19
2.3.3.4.2 Spill Risk 2-20
2.3.3.4.3 Transfer 2-20
2.3.3.4.4 Containment and Safety Equipment 2-20
2.3.3.4.5 Drainage Control 2-20
2.3.3.4.6 Spill Response Strategies 2-20
2.3.3.4.7 Security 2-20
2.3.3.5 Ground Support Equipment – Air Operations (AP) Building 406 2-20
2.3.3.5.1 General Information 2-20
2.3.3.5.2 Spill Risk 2-21
2.3.3.5.3 Transfer 2-21
2.3.3.5.4 Containment and Safety Equipment 2-21
2.3.3.5.5 Drainage Control 2-21
2.3.3.5.6 Spill Response Strategies 2-21
2.3.3.5.7 Security 2-21
2.3.3.6 Supply Department Hazardous Material Storage Building 401 2-21
2.3.3.6.1 General Information 2-21
2.3.3.6.2 Spill Risk 2-22
2.3.3.6.3 Transfer 2-22
2.3.3.6.4 Containment and Safety Equipment 2-22
2.3.3.6.5 Drainage Control 2-22
2.3.3.6.6 Spill Response Strategies 2-22
2.3.3.6.7 Security 2-22
2.3.3.7 Other Capodichino Oil and Hazardous Substance Storage Location 2-22
2.4 SUPPORT SITE 2-24
2.4.1 General Drainage Information 2-24
2.4.2 Support Site POL Facilities 2-26
2.4.2.1 AST SS-2075 2-26
2.4.2.1.1 General Information 2-26
2.4.2.1.2 Spill Risk 2-26

2.4.2.1.3 Transfer 2-26
2.4.2.1.4 Containment and Safety Equipment 2-26
2.4.2.1.5 Drainage Control 2-26
2.4.2.1.6 Spill Response Strategies 2-27
2.4.2.1.7 Security 2-27
2.4.2.2 AST SS-2077 2-27
2.4.2.2.1 General Information 2-27
2.4.2.2.2 Spill Risk 2-27
2.4.2.2.3 Transfer 2-27
2.4.2.2.4 Containment and Safety Equipment 2-27
2.4.2.2.5 Drainage Control 2-27
2.4.2.2.6 Spill Response Strategies 2-28
2.4.2.2.7 Security 2-28
2.4.2.3 Other Support Site POL Storage Tanks 2-28
2.4.3 Support Site Oil and Hazardous Substance and Dangerous Waste Storage Facilities 2-29
2.4.3.1 PW Environmental (TDW) Building 2080 2-29
2.4.3.1.1 General Information 2-29
2.4.3.1.2 Spill Risk 2-29
2.4.3.1.3 Transfer 2-30
2.4.3.1.4 Containment and Safety Equipment 2-30
2.4.3.1.5 Drainage Control 2-30
2.4.3.1.6 Spill Response Strategies 2-30
2.4.3.1.7 Security 2-30
2.4.3.2 Hospital (TDW) Building 2082 2-30
2.4.3.2.1 General Information 2-30
2.4.3.2.2 Spill Risk 2-30
2.4.3.2.3 Transfer 2-30
2.4.3.2.4 Containment and Safety Equipment 2-31
2.4.3.2.5 Drainage Control 2-31
2.4.3.2.6 Spill Response Strategies 2-31
2.4.3.2.7 Security 2-31
2.4.3.3 Elementary School (AP) Building 2057 2-31
2.4.3.3.1 General Information 2-31
2.4.3.3.2 Spill Risk 2-31
2.4.3.3.3 Transfer 2-31
2.4.3.3.4 Containment and Safety Equipment 2-32
2.4.3.3.5 Drainage Control 2-32
2.4.3.3.6 Spill Response Strategies 2-32
2.4.3.3.7 Security 2-32
2.4.3.4 High School (AP) Building 2058 2-32
2.4.3.4.1 General Information 2-32

2.4.3.4.2 Spill Risk 2-32
2.4.3.4.3 Transfer 2-32
2.4.3.4.4 Containment and Safety Equipment 2-33
2.4.3.4.5 Drainage Control 2-33
2.4.3.4.6 Spill Response Strategies 2-33
2.4.3.4.7 Security 2-33
2.4.3.5 Morale, Welfare and Recreation (MWR) Auto Hobby Shop (AP) Building 2076 2-33
2.4.3.5.1 General Information 2-33
2.4.3.5.2 Spill Risk 2-33
2.4.3.5.3 Transfer 2-33
2.4.3.5.4 Containment and Safety Equipment 2-34
2.4.3.5.5 Drainage Control 2-34
2.4.3.5.6 Spill Response Strategies 2-34
2.4.3.5.7 Security 2-34
2.4.3.6 Naval Exchange (NEX) Auto Port (AP) Building 2092 2-34
2.4.3.6.1 General Information 2-34
2.4.3.6.2 Spill Risk 2-34
2.4.3.6.3 Transfer 2-34
2.4.3.6.4 Containment and Safety Equipment 2-35
2.4.3.6.5 Drainage Control 2-35
2.4.3.6.6 Spill Response Strategies 2-35
2.4.3.6.7 Security 2-35
2.4.3.7 Other Support Site Hazardous Substance Storage Location 2-35
2.5 CARNEY PARK 2-36
2.5.1 General Drainage Information 2-36
2.5.2 Carney Park POL Facilities 2-37
2.5.2.1 AST CP-522 2-37
2.5.2.1.1 General Information 2-37
2.5.2.1.2 Spill Risk 2-38
2.5.2.1.3 Transfer 2-38
2.5.2.1.4 Containment and Safety Equipment 2-38
2.5.2.1.5 Drainage Control 2-38
2.5.2.1.6 Spill Response Strategies 2-38
2.5.2.1.7 Security 2-38
2.5.2.2 Other Carney Park POL Storage Tanks 2-38
2.5.3 Carney Park Oil and Hazardous Substance and Dangerous Waste Storage Facilities 2-39
2.5.3.1 MWR (AP) Building 516 2-39
2.5.3.1.1 General Information 2-39
2.5.3.1.2 Spill Risk 2-39
2.5.3.1.3 Transfer 2-39
2.5.3.1.4 Containment and Safety Equipment 2-40

2.5.3.1.5 Drainage Control 2-40
2.5.3.1.6 Spill Response Strategies 2-40
2.5.3.1.7 Security 2-40
2.5.3.2 Other Carney Park Hazardous Substance Storage Location 2-40
2.6 LAGO PATRIA 2-41
2.6.1 General Drainage Information 2-41
2.6.2 Lago Patria POL Facilities 2-42
2.6.3 Lago Patria Oil and Hazardous Substance and Dangerous Waste Storage Facilities 2-42
2.7 CAMALDOLI 2-43
2.7.1 General Drainage Information 2-43
2.7.2 Camaldoli POL Facilities 2-43
2.7.2.1 AST CM-69 2-43
2.7.2.1.1 General Information 2-43
2.7.2.1.2 Spill Risk 2-43
2.7.2.1.3 Transfer 2-43
2.7.2.1.4 Containment and Safety Equipment 2-43
2.7.2.1.5 Drainage Control 2-44
2.7.2.1.6 Spill Response Strategies 2-44
2.7.2.1.7 Security 2-44
2.7.3 Camaldoli Oil and Hazardous Substance and Dangerous Waste Storage Facilities 2-44
2.8 TEVEROLA 2-45
2.8.1 General Drainage Information 2-45
2.8.2 Teverola Oil and Hazardous Substance and Dangerous Waste Storage Facilities 2-45
2.9 GAETA PIER AREA 2-47
2.9.1 General Drainage Information 2-47
2.9.2 Gaeta Pier POL Facilities 2-47
2.9.2.1 General Information 2-47
2.9.2.2 Spill Risk 2-48
2.9.2.3 Transfer 2-48
2.9.2.4 Containment and Safety Equipment 2-48
2.9.2.5 Drainage Control 2-48
2.9.2.6 Spill Response Strategies 2-48
2.9.2.7 Security 2-48
2.9.3 Gaeta Pier Area Oil and Hazardous Substance and Dangerous Waste Storage Facilities 2-48
2.9.3.1 General Information 2-48
2.9.3.2 Spill Risk 2-48
2.9.3.3 Transfer 2-49
2.9.3.4 Containment and Safety Equipment 2-49
2.9.3.5 Drainage Control 2-49
2.9.3.6 Spill Response Strategies 2-49

2.9.3.7 Security 2-49
2.10 Deficiencies and Corrective Actions 2-50

3.0 SPILL CONTROL & RESPONSE MANAGEMENT 3-1

3.1 NSA Naples OHS Spill Response Organization and Responsibilities. 3-1
3.1.1 SPILL MANAGEMENT TEAM (Tier 2) Activation 3-3
3.1.2 NOSC Support (Tiers 2 & 3) 3-4
3.2 Incident Command System Information 3-4
3.3 SPILL MANAGEMENT TEAM Structure & Staffing 3-5
3.4 SPILL MANAGEMENT TEAM Operations 3-8
3.4.1 Management Process- Planning and Meetings 3-8
3.4.2 SPILL MANAGEMENT TEAM Organization & Responsibilities 3-9
3.4.2.1 General 3-10
3.5 Command Staff 3-10
3.5.1 Safety Officer 3-11
3.5.2 Staff Judge Advocate (Legal Officer) 3-11
3.5.3 Public Affairs Officer (PAO) 3-12
3.5.4 Italian (HN) Liaison Officer 3-12
3.5.5 Medical Officer 3-12
3.5.6 Command Duty Officer (CDO) 3-12
3.5.7 EOC Liaison 3-13
3.6 General Staff - Functional Sections 3-13
3.7 Operations Section 3-14
3.7.1 Operations Section Chief 3-15
3.7.1.1 Recovery & Protection Branch Director 3-15
3.7.1.2 On-Water Recovery Group Supervisor (Gaeta) 3-15
3.7.1.3 Shore-side Clean-up Group Supervisor (Gaeta) 3-15
3.7.1.4 Protection Group Supervisor 3-15
3.7.1.5 Disposal Group Supervisor 3-16
3.7.2 Security Branch Director 3-16
3.8 Planning Section 3-16
3.8.1 Planning Section Chief 3-17
3.8.1.1 Environmental Unit Leader 3-17
3.8.1.2 Situation Unit Leader 3-17
3.8.1.3 Documentation Unit Leader 3-18
3.8.1.4 Waste Management Specialist 3-18
3.9 Logistics Section 3-18
3.9.1 Logistics Section Chief 3-19
3.9.1.1 Service Branch Director 3-19

3.9.1.2 Support Branch Director 3-20
3.10 FINANCE/ADMIN SECTION 3-20
3.10.1 Finance/Admin Section Chief *3-20*
3.10.2 Procurement Unit Leader *3-20*
3.10.3 Claims Unit Leader *3-21*
3.11 TYPICAL SPILL MANAGEMENT TEAM ACTIONS BY POSITION 3-21
3.11.1 Operations Section *3-21*
3.11.1.1 Initial Assessment 3-21
3.11.1.2 Response Methods 3-22
3.11.1.3 Incident Action Plan (Operations) 3-23
3.11.2 Planning Section *3-24*
3.11.2.1 Potential Impacts 3-24
3.11.2.2 Response Resource Availability 3-24
3.11.2.3 Reports and Status Updates 3-24
3.11.2.4 Environmental Issues 3-25
3.11.2.5 Sampling and Monitoring 3-25
3.11.2.6 Wildlife Considerations 3-26
3.11.2.7 Formal Approvals or Permits 3-26
3.11.2.8 Health and Safety Issues 3-26
3.11.2.9 Site Characterization 3-27
3.11.2.10 Sampling & Monitoring 3-27
3.11.2.11 Site-Safety Planning 3-27
3.11.2.12 Waste Management and Disposal 3-27
3.11.2.13 Temporary Storage 3-28
3.11.2.14 Disposal Plan 3-28
3.12 LOGISTICS SECTION 3-29
3.12.1 Food Services *3-29*
3.12.2 Equipment and Materials *3-29*
3.12.2.1 Staging Area 3-29
3.12.2.2 Stores and Supplies 3-30
3.12.2.3 Medical 3-31
3.12.2.4 Communications 3-32
3.13 FINANCE/ADMIN SECTION 3-33
3.13.1 Funding *3-33*
3.13.1.1 Pollution Response 3-33
3.13.1.2 Initial Emergency 3-33
3.13.1.3 Limitations 3-33
3.13.2 Estimating Cleanup Costs *3-34*
3.13.3 Contracting *3-34*
3.13.3.1 Authority 3-34

3.13.3.2 Staff Support 3-35
3.14 FUNDING OF OHS SPILL RESPONSE AND REIMBURSEMENT OF FUNDS 3-35
3.14.1 Funding Responsibilities *3-35*
3.14.2 Navy Reimbursement *3-35*
3.14.3 DLA/DESC Reimbursement Procedures *3-36*
3.14.4 Funding Documentation *3-36*
3.14.5 Cost Verification *3-36*
3.15 INCIDENT COMMAND MANAGEMENT 3-37
3.15.1 Command Post (CP) *3-37*
3.16 INCIDENT INFORMATION MANAGEMENT 3-37
3.16.1 ICS Staffing Requirements *3-38*
3.16.2 Response Team Support *3-38*
3.17 RESPONSE ACTIONS 3-39
3.18 RESPONSE EQUIPMENT 3-39
3.19 RESPONSE OVERVIEW 3-39
3.20 POTENTIAL IMPACTS 3-39
3.21 LAND RESPONSE 3-41
3.21.1 OHS/DW Facilities *3-41*
3.21.2 POL Facilities *3-41*
3.22 ON-WATER RESPONSE 3-42

4.0 REPORTING 4-1

4.1 AUTHORITY & RESPONSIBILITY 4-1
4.2 SPILL REPORTING PROCEDURES 4-1
4.2.1 Spill Notification *4-1*
4.2.2 Reportable Quantities (RQ) *4-1*
4.2.3 Reporting *4-2*
4.2.4 Liaison *4-3*
4.2.5 Executive Agent Notification. *4-3*
4.2.6 Reports and Messages *4-3*
4.3 POST DISCHARGE INTERNAL REPORTING 4-4

5.0 TRAINING 5-1

5.1 GENERAL REQUIREMENTS 5-1
5.2 TRAINING, DRILLS, & EXERCISES 5-1
5.2.1 Regulatory Requirements *5-1*
5.2.2 Policy *5-2*
5.3 PERSONNEL TRAINING REQUIREMENTS 5-2

5.3.1 General *5-3*
5.3.1.1 HAZCOM & HAZWOPER 5-3
5.3.1.2 HW Management 5-3
5.3.2 Oil and Hazardous Substance Worker *5-3*
5.3.2.1 Emergency Response 5-3
5.3.2.2 SPR Plan 5-3
5.3.2.3 STMP 5-4
5.3.2.4 FGS Requirements 5-4
5.3.3 Response Team Members *5-4*
5.3.3.1 IRO/SMT 5-4
5.3.3.2 ICS 5-5
5.3.3.3 SMT & Tabletop Exercise 5-5
5.3.4 Other Training *5-5*
5.3.4.1 Fire Department 5-5
5.3.4.2 Fuels Division 5-6
5.3.4.3 Environmental Division 5-6
5.3.5 Program Management *5-6*
5.3.6 Record Keeping *5-7*
5.3.6.1 Location 5-7
5.3.6.2 Individual Schedules 5-7
5.3.6.3 Course Content 5-7
5.3.6.4 Retention 5-7
5.3.7 Training Courses *5-7*
5.3.8 Drills & Exercises *5-8*
5.3.9 Schedules *5-8*
5.3.10 Procedures & Logs *5-10*

List of Tables

TABLE 2-1 CAPODICHINO POL USTS 2-15
TABLE 2-2 CAPODICHINOTEMPORARY DEPOSIT OF WASTE AND ACCUMULATION POINTS 2-16
TABLE 2-3 OTHER CAPODICHINO OIL AND HAZARDOUS SUBSTANCE STORAGE LOCATIONS 2-23
TABLE 2-4 SUPPORT SITE POL USTS 2-28
TABLE 2-5 SUPPORT SITE TEMPORARY DEPOSIT OF WASTE AND ACCUMULATION POINTS 2-29
TABLE 2-6 OTHER SUPPORT SITE HAZARDOUS SUBSTANCE STORAGE LOCATIONS 2-36
TABLE 2-7 CARNEY PARK POL USTS 2-39
TABLE 2-8 OTHER CARNEY PARK HAZARDOUS MATERIAL STORAGE LOCATIONS 2-40

TABLE 2-9 DEFICIENCIES AND CORRECTIVE ACTIONS 2-50
TABLE 3-1 GAETA SENSITIVE AREA SITES 3-40
TABLE 3-2 STANDARD RESPONSE TO SPILLS FROM NON-BULK POL FACILITIES 3-42
TABLE 4-1 "SIGNIFICANT" SPILL THRESHOLDS 4-2
TABLE 4-2 EXTERNAL OHS SPILL REPORTING 4-2
TABLE 5-1 IRO/SMT TRAINING REQUIREMENTS 5-5
TABLE 5-2 ANNUAL ENVIRONMENTAL DIVISION-SPONSORED TRAINING COURSES 5-6
TABLE 5-3 ANNUAL OIL AND HAZARDOUS SUBSTANCES RESPONSE DRILL AND EXERCISE REQUIREMENTS 5-8
TABLE 5-4 CORE TEST COMPONENTS OF A RESPONSE PLAN 5-8
TABLE 5-5 NSA NAPLES DRILL SCHEDULE (EXAMPLE) 5-9
TABLE 5-6 TRIENNAL CYCLE DOCUMENTATION FORM 5-9
TABLE 5-7 FIC AND NOSC NOTIFICATION DRILLS 5-10
TABLE 5-8 FIC AND NOSC NOTIFICATION LOG 5-11
TABLE 5-9 SMT TABLETOP EXERCISE 5-12
TABLE 5-10 SMT TABLETOP DRILL & EXERCISE LOG 5-13
TABLE 5-11 SPILL RESPONSE EQUIPMENT DEPLOYMENT DRILLS 5-14
TABLE 5-12 RESPONSE EQUIPMENT DEPLOYMENT DRILL AND EXERCISE LOG 5-15
TABLE 5-13 UNANNOUNCED -EMERGENCY PROCEDURES DRILLS 5-16
TABLE 5-14 UNANNOUNCED-EMERGENCY PROCEDURES DRILL AND EXERCISE LOG 5-17

List of Figures

FIGURE 1-1 NSA NAPLES INSTALLATION LOCATION MAP 1-2
FIGURE 2-1 CAPODICHINO STORMWATER OUTFALL 2-8
FIGURE 2-2 CAPODICHINO STORMWATER COLLECTION AREA ADJACENT TO THE TANGENZIALE 2-8
FIGURE 2-3 CAPO AERIAL VIEW OF OUTFALL AND DRAINAGE PATH TO COLLECTION AREA 2-9
FIGURE 2-4 SUPPORT SITE STORMWATER OUTFALL 2-24
FIGURE 2-5 SUPPORT SITE AERIAL VIEW OF STORMWATER OUTFALL 2-25
FIGURE 2-6 CARNEY PARK AERIAL VIEW 2-37
FIGURE 2-7 LAGO PATRIA AERIAL VIEW 2-41
FIGURE 2-8 TEVEROLA AERIAL VIEW 2-45
FIGURE 2-9 GAETA COMPLEX AERIAL VIEW 2-47
FIGURE 3-1 BASIC NSA OHS SPILL RESPONSE ORGANIZATION 3-2
FIGURE 3-2 NSA NAPLES OHS INCIDENT MANAGEMENT STRUCTURE 3-3
FIGURE 3-3 NSA NAPLES SPILL MANAGEMENT TEAM ORGANIZATION 3-6
FIGURE 3-4 NSA NAPLES PLANNING "P" 3-9
FIGURE 3-5 NSA NAPLES COMMAND STAFF ORGANIZATION 3-11
FIGURE 3-6 NSA NAPLES OPERATIONS SECTION ORGANIZATION 3-14

FIGURE 3-7 PLANNING SECTION 3-17

FIGURE 3-8 LOGISTICS SECTION ORGANIZATION 3-19

FIGURE 3-9 FINANCE/ADMIN SECTION ORGANIZATION 3-20

FIGURE 3-10 TYPICAL SITUATION DISPLAY 3-38

List of Appendices

APPENDIX A *FGS* for ITALY (Chapters 5, 6, 9, 11, 18, & 19 & Appendices A, B, & C)

APPENDIX B OPNAVINST 5090 (Chapters 9, 10, 16, & 18)

APPENDIX C FACILITY LOCATIONS and DRAINAGE MAPS

APPENDIX D HS COMPATIBILITY MATRIX

APPENDIX E POL INSPECTION CHECKLISTS

APPENDIX F HW INSPECTION CHECKLIST

APPENDIX G SPILL PREDICTIONS & RESPONSE STRATEGIES

APPENDIX H SITE DRAWINGS & PHOTOS

APPENDIX I SMT ICS JOB AIDS & RESPONSIBILITIES

APPENDIX J SITE SAFETY PLAN & MONITORING PROGRAM

APPENDIX L EMERGENCY PUBLIC AFFAIRS PLAN

APPENDIX M SOP FOR INVENTORY CONTROL AND FUEL TRANSFER OPERATIONS

List of Acronyms

Note: The use of acronyms in this document is limited as much as practicable

ADMIN	Administration/Administrative
ABH	Aviation Boatswain's Mate
Air Ops	Air Operations Department
AMC	Air Mobility Command
AMS	Air Mobility Squadron
AOR	Area of Responsibility
AST	Aboveground Storage Tank
AUL	Authorized Users List
BEQ	Bachelor/Base Enlisted Quarters
Bldg	Building
CBH	Combined Bachelor Housing
CDC	Child Development Center
CDO	Command Duty Officer
CFR	Code of Federal Regulations
CHRIMP	Consolidated Hazardous Material Reutilization and Inventory Management Program
COMUSNAVEUR,	Commander United States Naval Forces Europe
CNE	Commander, U.S. Naval Forces, Europe
CNI	Commander Naval Instillations
CNO	Chief of Naval Operations
CNRE	Commander, Navy Region Europe
CO	Commanding Officer
CONUS	Continental United States
COMFAIRMED	Commander Fleet Air Mediterranean (U.S. Navy)
CSO	Command Staff Officer
Dept.	Department
DESC	Defense Energy Supply Center
DoD	United States Department of Defense
DODD	United States Department of Defense Dependent Schools
DOT	United States Department of Transportation
DRMO	Defense Reutilization and Marketing Office
DW	Dangerous Waste

EEWS	Emergency Eye Wash and Shower
EPA	United States Environmental Protection Agency
ERAP	Emergency Response Action Plan
EOC	Emergency Operations Center
EODMU-8	Explosive Ordnance Disposal Mobile Unit Eight
FD	Fire Department
FE	Fire Extinguisher
FGS	Final Governing Standards
FIC	Facility Incident Commander
Flam	Flammable(s)
FRT	Facility Response Team
FSS	Fire Suppression System
GOV	Government Owned Vehicles
HAZCOM	Hazard Communication
HAZMAT	Hazardous Material
HAZMIN	Hazardous Minimization (Center)
HDPE	High Density Polyethylene
HICS	Hazardous Inventory Control System
HM	Hazardous Material(s)
HMC & M	Hazardous Material Control and Management
HS	Hazardous Substance(s)
HSIRM	Hazardous Substance Incident Response Management
HW	Hazardous Waste(s)
HWAP	Hazardous Waste Accumulation Point
HWFOC	Hazardous Waste Facilities Operation Course
HWMP	Hazardous Waste Management Plan
HWSA	Hazardous Waste Storage Area
IAW	In Accordance With
IC	Incident Commander
ICS	Incident Command System
IMH	Incident Management Handbook
IOSC	Installation On-Scene Coordinator
IRO	Initial Response Organization
IRT	Installation Response Team (also known as OSOT)

JAG	Judge Advocate General
MCSF	Marine Corps Security Force
MIOC	Maritime Integrated Operations Center
MSDS	Material Safety Data Sheet
MWR	Morale Welfare Recreation
NATO	North Atlantic Treaty Organization
NAVOSH	Navy Occupational Safety & Health
NAVSEA	Naval Sea Systems Command
NAVSTA	Naval Station
NCTAMS	Naval Computer and Telecommunications Area Master Station
NEX	Naval Exchange
NMC	Naval Media Center
NMCB 1	Naval Mobile Construction Battalion One (Seabees)
NSWU-10	Naval Special Warfare Unit Ten
NOSC	Navy On-Scene Coordinator
NSA	Naval Support Activity
OEBGD	Overseas Environmental Baseline Guidance Document
OHS	Oil and/or Hazardous Substances
OPNAVINST	Operational Naval Instruction
OPREP	Operational Reporting
Ops	Operations
OSHA	Occupational Safety & Health Administration
OSC	On-Scene Coordinator
OSOT	On-Scene Operations Team
PAO	Public Affairs Officer
PCB	Polychlorinated Biphenyls
POL	(Refined) Petroleum, Oils and/or Lubricants
Port Ops	Port Operations Department
PPE	Personal Protective Equipment
ppm	parts per million
PREP	Preparedness for Response Exercise Program
PSD	Personnel Support Detachment
PW	Public Works
PWC	Public Works Center

PWD	Public Works Department
PWO	Public Works Officer
QI	Qualified Individual
RHICS	Regional hazardous Inventory Control System
ROICC	Resident Officer in Charge of Construction
RQ	Reportable Quantity
SCBA	Self-Contained Breathing Apparatus
SEVD	Southern Europe Veterinary Detachment
SFO	Senior Fire Official
SITREPS	Situation Reports
SMT	Spill Management Team
SRT	Secondary Response Team
SOP	Standard Operating Procedure
SPR(P)	Spill Prevention and Response (Plan)
STMP	Storage Tank Management Plan
Supply	Supply Department
SUPSALV	United States Navy Supervisor of Salvage (NAVSEA CODE 00C)
SWPPP	Storm Water POLLUTION Prevention Plan
TYP	Typical
TDW	Temporary Deposit of Waste
U.S.	United States
USN/MSC	United States Navy/Military Sealift Command
UST	Underground Storage Tank
VIP	Very Important Person(s)
WC	Work Center
XO	Executive Officer

Record of NSA Naples, Italy Spill Prevention and Response Plan Updates and Changes

Change Number	Page(s) Affected	Abstract	Date	Initials
1	1/ Vol II Section 2.9 2/ Vol II Section 2.11 3/ Vol II Section 2.11	1/ Removal of part on Monte Orlando Complex at Gaeta. 2/ Diesel Fuel Truck is now parked on containment in front of PWD. Item removed. 3/ Building 401 Floor drains were plugged, any spill would be contained. Item removed. Note: Some phone number adjustments, typos, and editing issues where also addressed.	March 2010	

Plan Certification

This Spill Prevention and Response Plan for Naval Support Activity Naples has been prepared in accordance with: good engineering practice; information provided to me by the facilities (which is assumed correct); and with the requirements of Chapter 18 (*Spill Prevention & Response Planning*) of the *Environmental Final Governing Standards* (for) *Italy*, approved 06 November 2002. This plan is adequate for each facility included. Adherence to the plan is the responsibility of the host installation.

Signature

7/9/08

Date

Christopher D. Caputi

Registered Professional Engineer

Virginia Registration No. 032382

Statement of Commitment

The Commanding Officer of Naval Support Activity, Naples Italy fully supports the U.S. Department of Defense policy to prevent spills of oil and hazardous substances due to DoD activities, and to provide for the prompt, coordinated response to contain and clean-up spills that might occur. NSA Naples will commit the necessary manpower, equipment, and materials required to implement this Spill Prevention and Response Plan as described herein, in accordance with the requirements of Chapter 18 (*Spill Prevention & Response Planning*) of the *Environmental Final Governing Standards* (for) *Italy*.

Signature: R B R

Printed Name: R. B. RABOSE, CAPT, USN

Title: C.O. NSA NAPLES, ITALY

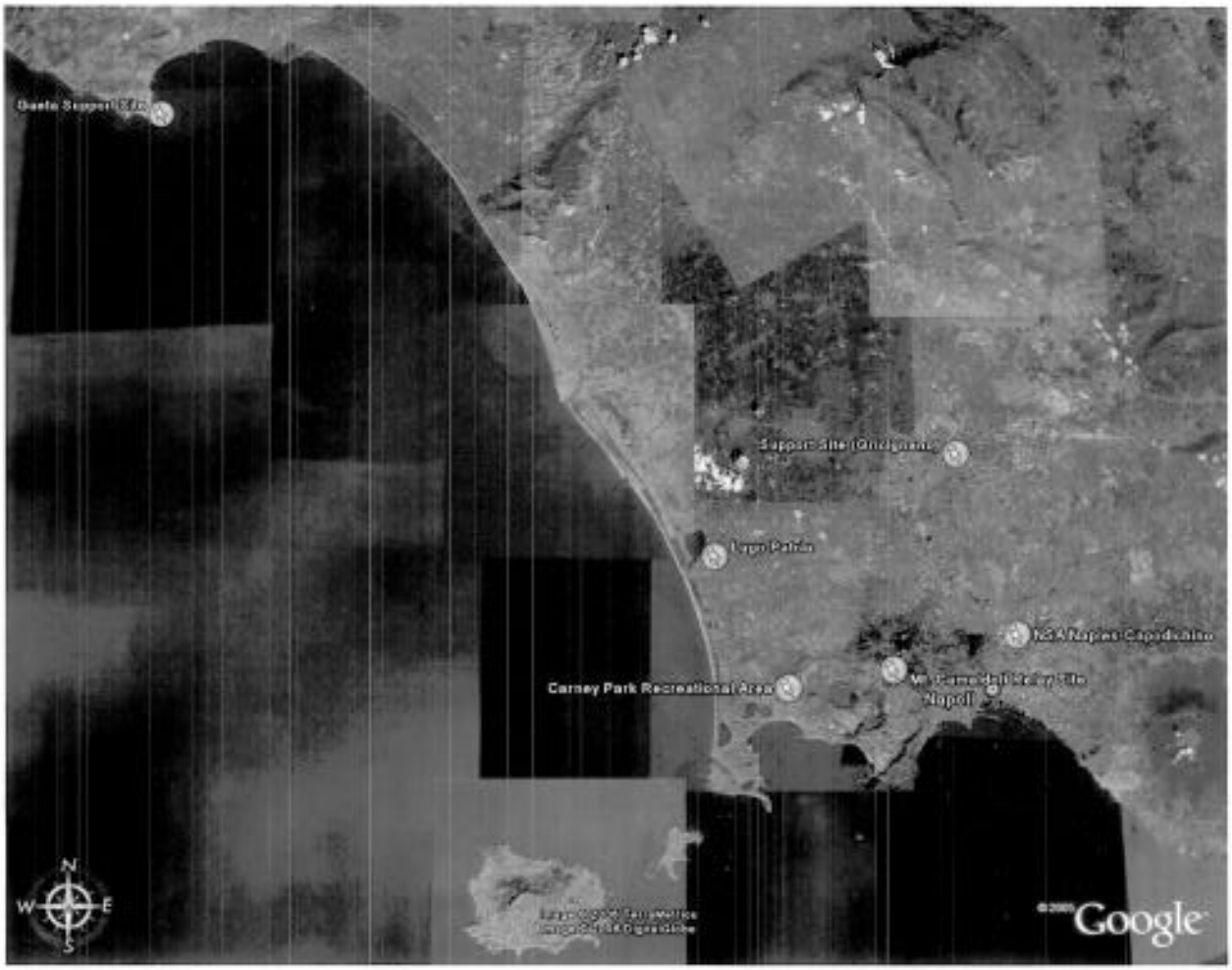
1.0 INTRODUCTION

1.1 General Facility Information

Naval Support Activity (NSA) Naples, Italy is comprised of eight separate facilities located throughout the metropolitan city of Naples and surrounding area and also includes the pier facility in Gaeta, Italy which is approximately100 kilometers north of Naples. A locality map of these facilities is provided in Figures 1-1. NSA Naples provides administrative and logistic support to over 100 tenant commands and activities throughout the Mediterranean region, which includes personnel assigned to North Atlantic Treaty Organization (NATO) and forces of the Sixth Fleet, which is managed at the Capodichino site located at the Naples International Airport. The following locations included in this plan that has petroleum, oils, lubricant and hazardous substance (OHS) and dangerous waste (DW) storage are:

a. Capodichino provides administrative, maintenance and support services for of the air facility; fleet shore based units and tenants, outgoing/incoming military flights in the European Theater and Continental United States (CONUS).
b. Carney Park is the NSA recreation center that includes a golf course, swimming pool, ball fields and camping facilities which is approximately 20 kilometers west of Capodichino in a 93 acre volcanic crater.
c. Lago Patria is used for telecommunications purposes and is approximately 31 kilometers north northwest of Capodichino.
d. Camaldoli Relay Station is used for telecommunication purposes.
e. Gricignano is known as the support site, consisting of housing, schools, Naval hospital, Navy Exchange, commissary and all aspects of community support and is located about 24 kilometers north of Capodichino.
f. Teverola is the location of the housing offices and a housing warehouse for NSA personnel.
g. Gaeta is the port location and support facility for the Sixth Fleet flag ship.

Figure 1-1 NSA Naples Installation Location Map



1.2 Plan Requirement

All U.S. Department of Defense (DoD) installations will prepare, maintain, and implement a Spill Prevention and Response Plan (SPRP) which provides for the prevention, control, and reporting of refined petroleum, oils, and lubricants (POL) and hazardous substance (HS) spills. The Plan will provide measures to the maximum extent practicable to prevent and contain a *worst case discharge* from the facility. The plan will be updated at least every 5 years or when there are significant changes to operations. This SPRP should be kept in a location easily accessible to the Facility Incident Commander (FIC) and Facility Response Team (FRT). NSA Naples meets the criteria for needing an SPRP because it manages oil (i.e. POL) and/or hazardous substances (OHS, collectively) storage facilities that could possibly produce a *significant spill*. A significant spill is defined as:

> An uncontained release to the land or water in excess of any of the following quantities:
>
> - For a dangerous waste or hazardous substance identified as a result of inclusion in Appendix A, any quantity in excess of the reportable quantity listed in Appendix A.
> - For POL or liquid or semi-liquid hazardous material, hazardous substance, or dangerous waste, in excess of 400 liters (110 gallons).
> - For other solid hazardous material, in excess of 225 Kg (500 pounds).
> - For combinations of POL and liquid, semi-liquid, and solid hazardous materials, hazardous substances, or dangerous waste in excess of 340 Kg (750 pounds).
> - If a spill is contained (inside an impervious berm, or on a nonporous surface, or inside a building), is not volatilized, and is cleaned up, the spill is considered a contained release and is not considered a significant spill.

1.3 Content

This SPRP has been prepared in accordance with Chapter 18 (*Spill Prevention & Response Planning*) of the *FGS*, as well as with Chapters 9 and 19 (*Petroleum, Oil, & Lubricants* and *Underground Storage Tanks* [USTs], respectively); each is provided in Appendix A of this document.
Section **2.0** shows details of critical facilities where a spill may occur. Standards from Operational Naval Instruction (OPNAVINST) 5090.1C were also used in the preparation of this plan.

The *Incident Management Handbook* (Volume I, *IMH*) of this SPRP is intended to provide the user with necessary information in the *initial* response to an oil and hazardous substances spill incident. The *IMH* is divided into the following sections:

Section 1: Emergency Spill Response Procedures
Section 2: Initial Response Organization Responsibilities
Section 3: Special Considerations
Section 4: Risks and Sensitive Areas
Section 5: Response Management
Section 6: Points-of-Contact, Forms, Acronyms, Message Reports

The associated SPRP Volume II, addresses spill prevention, control, reporting, and training, and also contains a number of appendices that provide additional information. The Section ***2.0*** provides an inventory of all facilities capable of producing a significant spill, and an inventory of materials stored at these facilities. It also provides a detailed description of oil and hazardous substances spill countermeasures, including structures and equipment for diversion and containment; a description of deficiencies in spill prevention and control measures at each facility; and written procedures for preventative maintenance operations; inspections; and record keeping requirements.

The ***3.0*** discusses the spill response organizations, with a discussion of roles and responsibilities for members of the Initial Response Organization (IRO) (also covered in the *IMH*) and the expanded Spill Management Team (SMT), should a spill event last beyond the initial response. This section of the plan also identifies resources and standard operating procedures for spill clean-up and other DoD and Italian agencies that can provide spill response and clean-up assistance.

The ***4.0*** section identifies record keeping when emergency procedures are invoked, and notifications requirements. The Training section identifies training required to ensure the effectiveness of personnel and equipment. Detailed information on POL storage facilities is provided in the STMP.

The ***5.0*** section describes the required oil and hazardous substances training and drill/exercise program and assigns responsibilities for personnel under the authority of the Commanding Officer (CO).

SPRP Volume II, Section 3.0 serves as the installation Hazardous Waste (HW) Contingency Plan, consistent with requirements of the Final Governing Standards *(FGS)* Chapter 6.0. The NSA Naples Hazardous Waste Management Plan (HWMP), dated January 2007, is incorporated by reference.

1.4 Implementation, Maintenance, & Update Requirements

The *FGS* chapters 9 and 18 requires the Spill Prevention and Response Plan be certified by a competent technical authority, and updated at least every five years, or whenever there are significant changes in operations. The plan certification is provided on page xiii. The responsibility for implementation of spill prevention and response at NSA Naples lies with the Commanding Officer. A statement of management commitment to Plan implementation is provided on page xiv. The Environmental Division of the Public Works Department is responsible for maintaining plan currency and to ensure that it is updated every five years.

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2.0 PREVENTION & RESPONSE

This section provides a detailed description of countermeasures, including structures and equipment for diversion and containment of spills, a description of deficiencies in spill prevention and control measures at each facility, and written procedures for operations to preclude spills of oil and hazardous substances, inspections, and record keeping requirements. The STMP, dated February 2005 provides a detailed discussion of all POL facilities. Appendix C provides all storage facility site locations and drainage maps. Detailed description of the NSA Naples stormwater collection system is provided in the Stormwater Pollution Prevention Plan (SWPPP) dated March 2006, which is incorporated herein by reference. Spill predictions and response strategies are discussed in Appendix G.

The list of spill response equipment and resources is attached to this plan by reference. The Fire and Emergency Services (F&ES), Emergency Services Department and PW Environmental keep updated inventories of their spill equipment in the following documents respectively: F&ES Hazmat Response Master Inventory, Emergency Response Plan, and PW Env Spill Equipment Inventory.

2.1 General Prevention Requirements

Facilities will adhere to the storage and handling requirements described in the Material Safety Data Sheets (MSDSs) accompanying the material. To protect human health and the environment, the following operational procedures will be used when handling and storing oil and hazardous substance containers.

2.1.1 Storage Locations

- Hazardous Materials should always be stored, even when only stored temporarily, at locations with secondary containment.
- Dangers of extreme heat, fire, explosion, and generation of toxic gases must be considered in the decision of a suitable storage location for POL, Hazardous Substance, and Dangerous Waste.
- A storage container holding a Hazardous Substance/Dangerous Waste that is incompatible with any materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.
- Containers used to store ignitable or reactive wastes must be located at least 15 meters (50 feet) inside the boundary of the installation.

- New hazardous substance dispensing areas will be located away from catch basins and storm drain lines. Existing hazardous substance dispensing areas currently located near catch basins and storm drains will be equipped with containment to prevent soil and groundwater contamination.
- Pest management facilities will be located away from waterways and flood areas.
- Toxic or flammable pesticides will not be located in inhabited buildings and will be kept on the ground floor. Elevate packaged pesticides on pallets.
- Toxic pesticides will be located in areas with sufficient ventilation and in facilities with adequate Personal Protective Equipment (PPE). As a minimum, the PPE indicated by the manufacturer on the pesticide label must be provided.
- Drums should be elevated from the soil or ground to prevent contact with materials that could promote corrosion. If pallets are used, the pallets should be in a good structural condition and stand flat on a level surface. Horizontal storage racks may be used to prevent rainwater accumulation on top of containers. Containers should be covered to protect from weather and corrosion.
- Outdoor hazardous substance /dangerous waste or POL storage areas should be located in traffic-safe areas or protected with properly marked traffic barriers.
- Water-reactive chemical substances should be stored in watertight containers in closed water-resistant lockers. These lockers should not be stored outdoors.

2.1.2 Materials Compatibility

Dangerous wastes and hazardous materials that can react with each other to cause extreme heat, explosions, and fire or toxic products must not be placed in the same container.

Containers used to store hazardous substances/dangerous wastes, including over pack containers, must be compatible with the materials stored. Appendix D contains a compatibility matrix between chemicals and construction and lining materials used for container and storage devices. This matrix can only be used to identify flagrant incompatibility problems only. Temperature, concentration, humidity and age also affect container suitability.

2.1.3 Container Management

Containers holding hazardous substances/dangerous wastes must be kept in good condition, free from severe rusting, bulging, or structural defects. Hazardous substances/dangerous wastes containers must be kept closed during storage except when necessary to add or remove material. Hazardous

substances/dangerous wastes containers must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

Mobile hazardous substances/dangerous wastes containers must be equipped with proper means of closure and with features to allow safe loading, unloading, and easy movement.

hazardous substances/dangerous wastes must not be placed in an unwashed container that previously held an incompatible material. Proper decontamination of hazardous substances/dangerous wastes containers must be performed before containers are reused. All personnel are required to consult with the Environmental Office for proper decontamination procedures. Hazardous substances/dangerous wastes containers and pesticides must be properly labeled in accordance with the *FGS*.

All empty and pressurized gas cylinders should be secured to pallets to prevent them from falling and must have covers.

2.1.4 Facility Management and Maintenance

Drip pans/absorbent materials will be placed under all POL and hazardous substances/dangerous wastes dispensing racks and drums as necessary to collect drips or spills.

Hazardous substances/dangerous wastes dispensing areas will be properly maintained.

All aisles and passageways should be kept clear of obstructions and readily accessible at all times to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.

Safety signs indicating "NO SMOKING," "NO OPEN FLAMES," "EXIT," and other safety instructions should be posted to designate dangerous areas. Signs should be posted in Italian and English.

All spill collection tanks should be emptied and cleaned after a spill has occurred.

Good 'housekeeping' procedures should be practiced to reduce the chance and facilitate in the detection of spills. Good housekeeping includes storing material in a neat and orderly manner, removing all trash

and debris from the storage area, re-pack or over-pack any damaged containers, and remove any slip, trip or fall hazards.

2.1.5 Security

The installation will prevent the unauthorized entry of persons into all facilities responsible for significant quantities of hazardous substances/dangerous wastes or POL. Unauthorized personnel have been able to enter and use areas in the past (i.e. unauthorized loading of dangerous waste tank, pilferage of chemicals, tampering with valves, and pumps). Adequate security reduces the likelihood of spill incidents due to tampering, vandalism, and sabotage. Site-specific and general security and lighting is addressed in this section, and in the storage tank management plan and hazardous waste management plan. Site security is the responsibility of each Command and the NSA Naples security department. The following security measures should be followed.

- Protection measures against vandalism, theft, sabotage or other improper and illegal use of the areas should be provided. These measures include fencing, lighting, vehicular traffic control, securing of equipment and buildings, including locks for valves, pumps, control switches, and gates, guards, and routine security patrols.
- Security fencing prevents unauthorized access to petroleum or chemical storage or handling areas.
- Gates in fences are designed using the same design manuals as fences, as specified in DM-22, DM-5.12, MIL-HDBK-1013/10, and MIL-HDBK-1013/1A. Any gates should be securely locked or guarded when the area is unattended or not in operation.
- All buildings, areas, and equipment susceptible to vandalism or unauthorized use, should be provided with appropriate locks to prevent actions, which could result in releases. This equipment includes valves, pumps, controls, and connections.
- Areas should have lighting that is commensurate with the type and location of the area. Lighting serves two purposes: the discovery of spills at night and the prevention of spills occurring through acts of vandalism. Emergency lighting may be required in the event of main power supply outages.
- Including chemical storage and handling areas in routine base security patrols or dedicating security personnel to those areas during non-duty hours adds an extra level of security protection. Security personnel can be instructed to observe leaks from tanks, valves, or pipelines while patrolling the installation. Briefing security personnel on how recognizing potential spill situations and chemical hazards, on the location and operation of fire protection equipment and alarms, and on procedures to follow when a spill is detected, are also highly recommended.

2.1.6 Inspections

Inspections must be scheduled at intervals that allow problems to be identified and corrected before they harm human health or the environment. Appendix E provides spill prevention inspection checklists for POL storage tanks and drum storage areas that may be used if activity checklists are not available.

- Dangerous waste container storage areas must be inspected weekly for leaking containers and deterioration of containers and the containment system caused by corrosion or other factors. A written schedule and logbook of inspections is to be kept at all hazardous substances/dangerous wastes accumulation points. Appendix F provides weekly and monthly inspection sheets for HWAPs and Hazardous Waste Storage Areas (HWSAs) as found in the HWMP. It also provides for documentation of deficiencies noted during inspections.
- Routine inspections for malfunctions and deterioration, operational errors, and discharges that may be causing, or may lead to, a release of hazardous substances/dangerous wastes constituents to the environment or threat to human health must be performed at all hazardous substances/dangerous wastes accumulation points
- Such inspections must include all equipment and areas involved in storage and handling of hazardous substances/dangerous wastes.
- Deficiencies detected during routine inspections that are egregious and repetitive are reported to the Facility Incident Commander. Deficiencies should be corrected in a timely manner to reduce the risk of a significant spill occurrence.
- Inspection records and inspection logs will be kept at each facility.

2.1.7 Written Procedures

All facilities handling and storing hazardous substances/dangerous wastes and POL follow the procedures identified in *FGS* for Italy Chapter 5. The NSA Naples Hazardous Waste Management Plan of January 2007 covers Standard Operating Procedures (SOPs) for the collection, containerization, labeling, marking, record keeping, transfer and storage of dangerous waste. Standard operating procedures established by NSA Naples departments and tenant commands and those identified through the various tiers of training are discussed in Section 5 of this volume. In addition those facilities and work centers that store and handle large quantities of hazardous substances/dangerous wastes and POL have detailed standard operating procedures.

2.1.8 Oil and Hazardous Substances/Dangerous Waste Minimization

The Consolidated Hazardous Materials Reutilization and Inventory Management Program (CHRIMP, et al HAZMIN Center) encourages money to be saved, inventories reduced, and safety standards enforced.

By consolidating like materials and accumulating materials for reuse or recycling, the program eliminates unnecessary inventories of hazardous materials and provides an opportunity to review materials for less hazardous substitutes. NSA Naples has successfully implemented CHRIMP where hazardous substances users are able to maintain only a 7-day supply. Materials not used in that period are returned to CHRIMP. Hazardous substance inventories for all end-users may be obtained through the Regional Hazardous Inventory Control System (RHICS) at the HAZMIN center.

2.2 Inventory of Storage, Handling, & Transfer Sites Capable of Producing a Significant Spill

This section details the facilities at NSA Naples that store oil and hazardous substances in quantities large enough to possibly produce a significant spill (and are therefore considered to be of "high risk" and are required to be inventoried per *FGS C18.2.1.3*) as defined by the *FGS*, Chapter 18 (see Appendix A).

A wide variety of oil and hazardous substances are stored in, in storage lockers and buildings, which for the most part are designed for the safe contained storage and handling of oil and hazardous substances. Spill prevention is achieved through the use of flammable and hazardous storage lockers, over pack drums and containment pallets, curbed or building containment without floor drains. All locations are equipped with spill kits and storage and handling and spill notification procedures are posted in both Italian and English. Authorized user list (AUL) for hazardous material used in the facility is available in plastic pocket marked MSDS in each storage locker. Specific information can be retrieved through computerized databases at CHRIMP and the Safety Office. Training is provided to all personnel on proper storage, handling and spill clean-up.

Appendix H provides site drawings and photos for all oil and hazardous substances facilities with the potential of causing a significant spill and a photo log of other Hazardous Material storage locations.

The list of those locations for which site specific procedures could be prepared are:

Capodichino:

AST C-412 Air Cargo building 412

AST C-449 BEQ – BLDG 449

USTs C-476 Government Gas Station building 476

Camaldoli:

AST CM-69 repeater site building

Support Site:

AST SS-2075 PW building 2075

AST SS-2077 AFN Studio-building 2077

Government Gas Station

The NSA Naples HWMP, which is incorporated into this plan by reference, contains weekly and quarterly inspection sheets, deficiency notice forms, and a snapshot in time of the types of dangerous waste stored. The safety department maintains a database of all authorized users and hazardous materials.

2.2.1.1 Standard Hazardous Material Spill Response Procedures

Standard Hazardous Material spill response procedures are in accordance with the NSA Naples Fire Department (FD) *Hazardous Material (HAZMAT) Standard Instruction and Response Plan*, and are incorporated into this section. Due to the nature of HS, protection of health and safety is the primary initial objective, with particular care to prevent exposure through the aggressive use of site controls, assessment tools, and PPE. Following the stabilization of a spill site, the following standard response phases are to be used:

1. Control the source of the spill;
2. Contain the spill to minimize potential impacts;
3. Protect sensitive areas (storm drains, ditches, flora/fauna, etc.); and
4. Recover spilled materials and collateral waste and reclaim if possible.

2.3 Capodichino

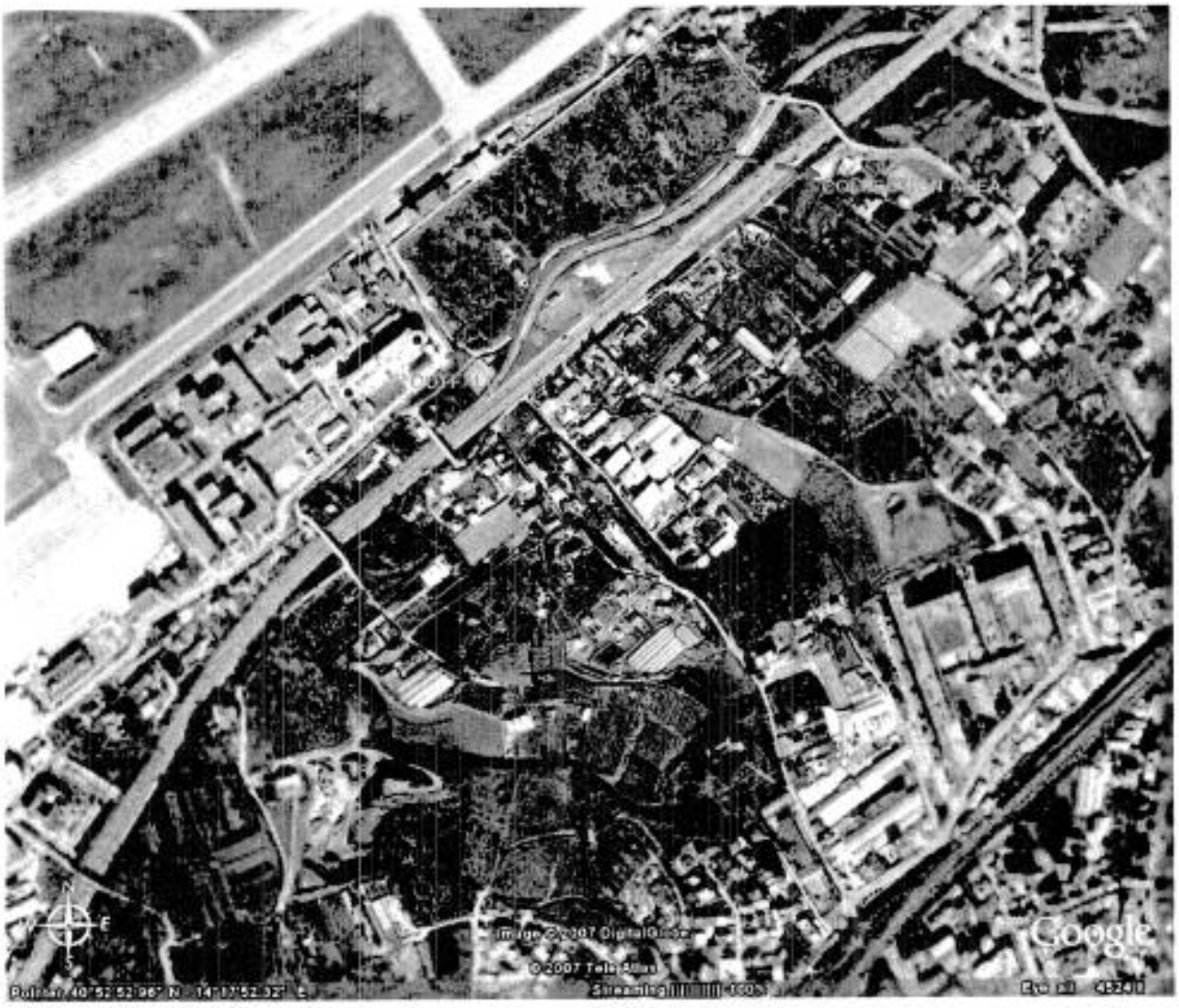
2.3.1 General Drainage Information

The site drainage map provided in Appendix C shows five areas (A-E) of storm water collection. Areas A-E drains to a single storm water outfall at the southeast corner of the facility (Figure 2-1). Stormwater enters an underground pipe which transitions to an aboveground concrete lined drainage swale that runs easterly along the Tangenziale di Napoli (A56) for approximately **0.6 kilometers**. Stormwater continues south via underground piping under the Tangenziale and empties into an open concrete lined collection area located on the south side of the Tangenziale (Figure 2-2). If spills are uncontained there are no controls in place to prevent a spill from leaving the facility via the storm drain system. Storm drainage on the aircraft parking apron empties into a leach field adjacent to taxiway TS after passing through an Oil Water Separator.

Figure 2-1 Capodichino Stormwater Outfall

Figure 2-2 Capodichino Stormwater Collection Area Adjacent to the Tangenziale

Figure 2-3 Capo Aerial View of Outfall and Drainage Path to Collection Area


Google

2.3.2 Capodichino POL Facilities

The following sections discuss facilities that regularly store, handle, and/or transfer POL that have the potential to cause a significant spill. Photos and site drawings are provided in Appendix H.

2.3.2.1 Aircraft Parking Apron

2.3.2.1.1 General Information

Aircraft assigned to NSA Naples and transient aircraft are parked and fueled on the parking apron. There is no POL storage on the parking apron

2.3.2.1.2 Spill Risks

The spill risks on the parking are from overfills or a vehicle collision with a parked aircraft.

2.3.2.1.3 Transfer

Aircraft are fueled via commercial aircraft fuel trucks at a rate of 300 gallons per minute. All fuel trucks are outfitted with a Sculley system and brake interlock system. All fuel transfers are continuously manned operations.

2.3.2.1.4 Containment and Safety Equipment

A spill kit is located on the parking apron. Fire extinguishers are located on the parking apron. PPE is not required.

2.3.2.1.5 Drainage Control

This facility is located in drainage area D. Storm drains on the aircraft parking apron empty into a leach field adjacent to taxiway TS.

2.3.2.1.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.3.2.1.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.3.2.2 AST C-412

2.3.2.2.1 General Information

This is an 8000 liter, horizontal cylinder steel Aboveground Storage Tank (AST) that contains diesel fuel for emergency generators and heating at building 412.

2.3.2.2.2 Spill Risk

Spills from this tank would be from a catastrophic failure of the tank and secondary containment structure or from overfills not captured in the containment.

2.3.2.2.3 Transfer

This tank is filled from a fuel truck and all filling operations are constantly monitored. This tank does have a level gauge by which fuel level may be monitored during filling operations.

2.3.2.2.4 Containment and Safety Equipment

This AST has adequate secondary containment spill containment. Clean up and safety equipment is not required at this tank location. There is a fire hydrant in close proximity to building 412.

2.3.2.2.5 Drainage Control

This tank is in drainage area D and would ultimately leave the facility at the single outfall.

2.3.2.2.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.3.2.2.7 Security

The tank is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.3.2.3 AST C-449

2.3.2.3.1 General Information

This is an 8,500 liter; rectangular concrete encased steel AST that contains heating oil for building 449

2.3.2.3.2 Spill Risk

Spills from this tank would be from a catastrophic failure of the tank or from overfills.

2.3.2.3.3 Transfer

This tank is filled from a fuel truck and all filling operations are constantly monitored. This tank does have a level gauge and a high level alarm by which fuel level may be monitored during filling operations.

2.3.2.3.4 Containment and Safety Equipment

This AST is encased in concrete and has a High Density Polyethylene (HDPE) secondary containment liner. Clean up and safety equipment is not required at this tank location. There is a fire hydrant in close proximity to building 449.

2.3.2.3.5 Drainage Control

This tank is in drainage area A and would ultimately leave the facility at the single outfall.

2.3.2.3.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.3.2.3.7 Security

The tank is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.3.2.4 PWD Diesel Fuel Truck

2.3.2.4.1 General Information

This is an 8000 liter diesel fuel truck used for fueling emergency generators.

2.3.2.4.2 Spill Risk

Spills from this tank would be from a catastrophic failure of the tank or from the vehicle being involved in an accident. This vehicle is most at risk while it is being filled at the GOV gas station at the East Parking Garage, building 461. This fuel truck is parked with fuel in the Public Works (PW) parking lot.

2.3.2.4.3 Transfer

This truck is filled at the Government owned vehicles (GOV) gas station using the 10 gallon per minute diesel dispenser used to fill vehicles. Appendix M provides an SOP for inventory control and fuel transfer operations.

2.3.2.4.4 Containment and Safety Equipment

Clean up and safety equipment is not required at this tank location. The truck is equipped with a fire extinguisher.

2.3.2.4.5 Drainage Control

This is parked in drainage area B and would ultimately leave the facility at the single outfall.

2.3.2.4.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.3.2.4.7 Security

This parked in a well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.3.2.5 Other Capodichino POL Storage Tanks

The following table is a list of POL USTs that pose a spill risk from overfills or if leaking would contaminate subsurface soils, but would not cause a significant spill by definition. Tank locations and general area spill direction and receptors are indicated on the site map provided in Appendix C. Detailed information on these USTs, including photos and site drawings, is provided in the STMP dated July 2006.

Table 2-1 Capodichino POL USTs

Type of Tank	Tank Number	Building	Nominal Capacity (L)	Type of Oil
UST	C-403	403	5000	Diesel
UST	C-407	407	15160	Diesel
UST	C-415	415	8500	Diesel
UST	C-440.1	440	15000	Diesel
UST	C-440.2	440	15000	Diesel
UST	C-440.3	440	15000	Diesel
UST	C-440.4	440	15000	Diesel
UST	C-440.5	440	15000	Diesel
UST	C-440.6	440	15000	Diesel
UST	C-442.1	442	15160	Diesel
UST	C-442.2	442	15160	Diesel
UST	C-442.3	442	15160	Diesel
UST	C-443	443	12000	Diesel
UST	C-447	447	3000	Diesel
UST	C-448	448	8500	Diesel
UST	C-451	451	7500	Diesel

Type of Tank	Tank Number	Building	Nominal Capacity (L)	Type of Oil
UST	C-459	459	1800	Diesel
UST	C-476.1	476	15000	Diesel
UST	C-476.2	476	15000	Diesel
UST	C-476.3	476	15000	Unleaded

2.3.3 Capodichino Oil and Hazardous Substance and Dangerous Waste Storage Facilities

Capodichino has are two (2) TDW storage locations and three (3) HWAP, listed in Table 2-2 that are discussed in detail in this section due to the nature and quantity of materials stored and handled. A review of the AULs of all oil and hazardous material storage locations indicates that none store oil and hazardous material in sufficient quantities that would produce a significant spill. These locations are listed in Table 2-3 since oil and hazardous material are frequently being handled both manually and by forklift, which increases the probability of containers being dropped.

Table 2-2 CapodichinoTemporary Deposit of Waste and Accumulation Points

HW SITE TYPE	FACILITY NUMBER	RESPONSIBLE OFFICE
TDW	402A	PW - Environmental
TDW	402	DRMO
AP	401	Supply - CHRIMP
AP	407	PW - Transportation
AP	406	GSE – Air Operation

2.3.3.1 PW Environmental (TDW) Building 402A

2.3.3.1.1 General Information

This storage location is used to consolidate waste prior to pick up by Defense Reutilization and Marketing Office (DRMO).

2.3.3.1.2 Spill Risk

Spill risk is from the handling of materials during transfer and consolidation.

2.3.3.1.3 Transfer

All transfers are done by hand and forklift.

2.3.3.1.4 Containment and Safety Equipment

Materials are stored within containment berms or in overpack drums Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.3.3.1.5 Drainage Control

The facility is designed to contain releases within the building.

2.3.3.1.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.3.3.1.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.3.3.2 DRMO (TDW) Building 402

2.3.3.2.1 General Information

DRMO stores Hazardous waste in building 402 prior to there pickup by the disposal contractor. Spill risk from this facility is from the handling of materials and consolidation particularly by forklift.

2.3.3.2.2 Spill Risk

Spill risk is from the handling of materials during consolidation and transfer.

2.3.3.2.3 Transfer

Materials are generally moved by forklift.

2.3.3.2.4 Containment and Safety Equipment

Materials are stored within containment within the building. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.3.3.2.5 Drainage Control

The facility is designed to contain releases within the building.

2.3.3.2.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections I and 5 of this plan.

2.3.3.2.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.3.3.3 CHRIMP (AP) Building 401

2.3.3.3.1 General Information

CHRIMP stores hazardous substances issued to various authorized users. This facility is located outside of building 401.

2.3.3.3.2 Spill Risk

Spill risk is from the handling of materials during issue and consolidation.

2.3.3.3.3 Transfer

No transfers are done at this facility.

2.3.3.3.4 Containment and Safety Equipment

Materials are stored within HAZMAT lockers with containment. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.3.3.3.5 Drainage Control

There is a storm drain located within the CHRIMP compound. A release entering this drain located in drainage area C would ultimately leave the facility at the single outfall.

2.3.3.3.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections I and 5 of this plan.

2.3.3.3.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security provided 24 hours a day for 365 days a year.

2.3.3.4 Public Works Transportation (AP) Building 407

2.3.3.4.1 General Information

The Public works transportation department uses and store various quantities and types of hazardous material and generates dangerous waste.

2.3.3.4.2 Spill Risk

Spill risk is from the handling of materials during use and consolidation.

2.3.3.4.3 Transfer

Oil and lubricant transfers are made via pumps and overhead piping from the lubricant and oil storage room to the vehicle maintenance bays. Other transfers are done by hand.

2.3.3.4.4 Containment and Safety Equipment

Materials are stored in various rooms on containment pallets within the transportation department maintenance area. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.3.3.4.5 Drainage Control

Any release within the transportation maintenance area would be contained within the building.

2.3.3.4.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections I and 5 of this plan.

2.3.3.4.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security provided 24 hours a day for 365 days a year.

2.3.3.5 Ground Support Equipment – Air Operations (AP) Building 406

2.3.3.5.1 General Information

The Air operations department uses and store various quantities and types of hazardous material and generates dangerous waste.

2.3.3.5.2 Spill Risk

Spill risk is from the handling of materials during use and consolidation.

2.3.3.5.3 Transfer

No transfers are made at this facility.

2.3.3.5.4 Containment and Safety Equipment

Materials are hazardous storage lockers in two rooms within hangar 406. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.3.3.5.5 Drainage Control

Any release within the hangar area would be contained within the building.

2.3.3.5.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections I and 5 of this plan.

2.3.3.5.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security provided 24 hours a day for 365 days a year.

2.3.3.6 Supply Department Hazardous Material Storage Building 401

2.3.3.6.1 General Information

The Supply department stores various quantities and types of hazardous material for issue to authorized users.

2.3.3.6.2 Spill Risk

Spill risk is from the handling of materials during stocking and issue.

2.3.3.6.3 Transfer

Materials are moved by forklift.

2.3.3.6.4 Containment and Safety Equipment

Materials are stored on shelves within an area designed for hazardous material (HM) storage. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.3.3.6.5 Drainage Control

Per the Hazardous Waste Management Plan there are trench drains within this storage area that are connected to the storm water drainage system. A release entering this drain located in drainage area C would ultimately leave the facility at the single outfall.

2.3.3.6.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections I and 5 of this plan.

2.3.3.6.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security provided 24 hours a day for 365 days a year.

2.3.3.7 Other Capodichino Oil and Hazardous Substance Storage Location

The following table is a list of other hazardous material storage locations that pose a spill risk from leaking containers or from spills during container handling, but *would not* cause a significant spill by definition. Hazardous material storage locations and general area spill direction and receptors are indicated on the site map provided in Appendix C.

Table 2-3 Other Capodichino Oil and Hazardous Substance Storage Locations

Building Number and Tenant
Building 407 – Public Works
Building 403 – Fire and Security
Building 440 – Command Headquarters
Building 451 – Gym
Building 459 – Water Treatment Plant

2.4 Support Site

2.4.1 General Drainage Information

The site drainage map provided in Appendix C shows six areas (A-F) of storm water collection. Areas A-F drains to a single storm water outfall at the southeast of the facility (Figure 2-4 and Figure 2-5). If spills are uncontained there are no controls in place to prevent a spill from leaving the facility via the storm drain system.

Figure 2-4 Support Site Stormwater Outfall

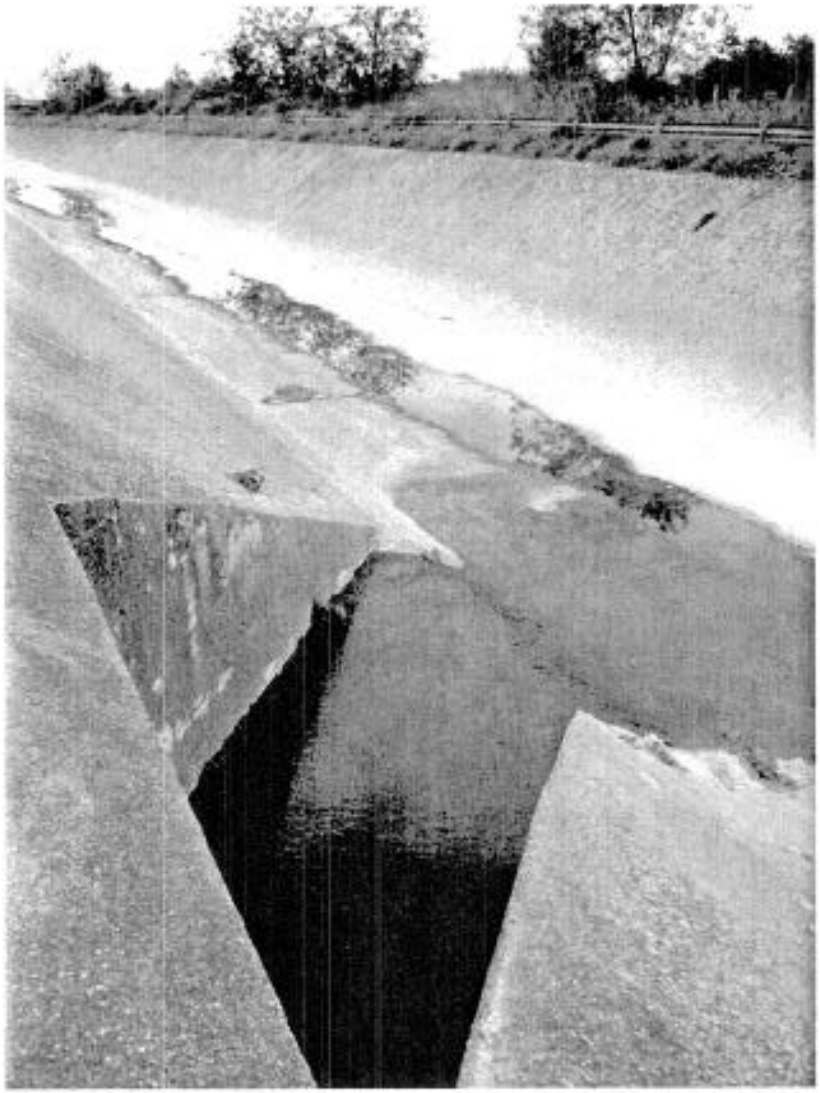
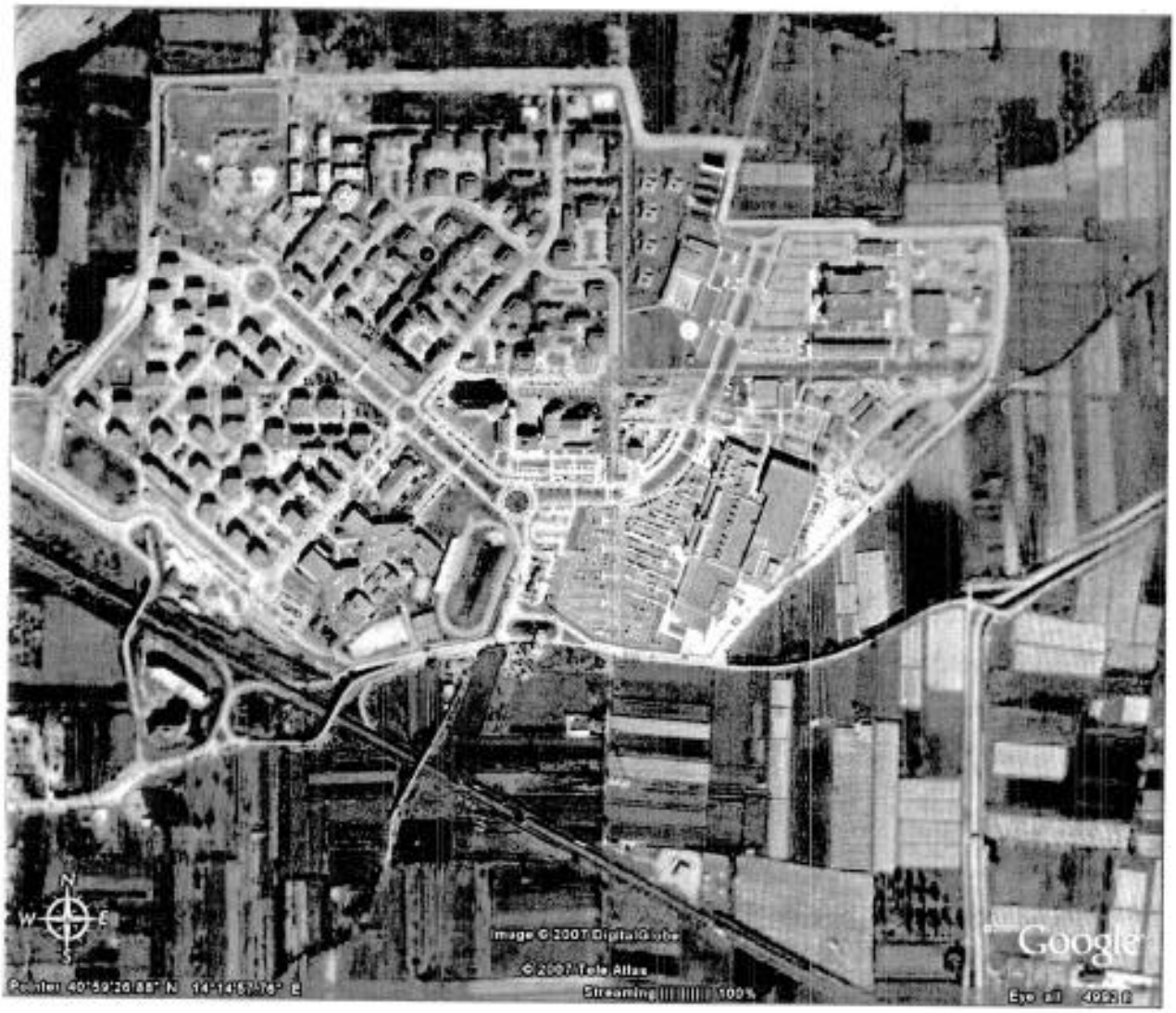


Figure 2-5 Support Site Aerial View of Stormwater Outfall



2.4.2 Support Site POL Facilities

The following sections discuss facilities that regularly store, handle, and/or transfer POL that have the potential to cause a significant spill. Photos and site drawings are provided in Appendix H.

2.4.2.1 AST SS-2075

2.4.2.1.1 General Information

This is a 1300 liter, horizontal cylinder steel AST that contains diesel fuel for the emergency generator at Public Works building 2075.

2.4.2.1.2 Spill Risk

Spills from this tank would be from a catastrophic failure of the tank and secondary containment structure or from overfills not captured in the containment.

2.4.2.1.3 Transfer

This tank is filled from a fuel truck and all filling operations are constantly monitored. This tank does have a level gauge by which fuel level may be monitored during filling operations.

2.4.2.1.4 Containment and Safety Equipment

The secondary containment for this tank is inadequate. Clean up and safety equipment is not required at this tank location. There is a fire hydrant in close proximity to building 2075.

2.4.2.1.5 Drainage Control

This tank is in drainage area A and would ultimately leave the facility at the single outfall.

2.4.2.1.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.2.1.7 Security

The tank is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.2.2 AST SS-2077

2.4.2.2.1 General Information

This is a 5000 liter, horizontal cylinder steel AST that contains diesel fuel for the emergency generator at AFN building 2077.

2.4.2.2.2 Spill Risk

Spills from this tank would be from a catastrophic failure of the tank and secondary containment structure or from overfills not captured in the containment.

2.4.2.2.3 Transfer

This tank is filled from a fuel truck and all filling operations are constantly monitored. This tank does have a level gauge by which fuel level may be monitored during filling operations.

2.4.2.2.4 Containment and Safety Equipment

The secondary containment for this tank is adequate. Clean up and safety equipment is not required at this tank location. There is a fire hydrant in close proximity to building 2077.

2.4.2.2.5 Drainage Control

This tank is in drainage area F and would ultimately leave the facility at the single outfall.

2.4.2.2.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.2.2.7 Security

The tank is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.2.3 Other Support Site POL Storage Tanks

The following table is a list of POL USTs that pose a spill risk from overfills or if leaking would contaminate subsurface soils, but would not cause a significant spill by definition. Tank locations and general area spill direction and receptors are indicated on the site map provided in Appendix C. Detailed information on these USTs, including photos and site drawings, is provided in the STMP dated July 2006.

Table 2-4 Support Site POL USTs

Type of Tank	Tank Number	Building	Nominal Capacity (L)	Type of Oil
UST	SS-2081-B.1	2081	10000	Diesel
UST	SS-2081-B.2	2081	10000	Mogas
UST	SS-2081-B.3	2081	10000	Mogas
UST	SS-2086.1	2086	15000	Diesel
UST	SS-2086.2	2086	15000	Diesel
UST	SS-2086.3	2086	15000	Diesel
UST	SS-2086.4	2086	15000	Diesel
UST	SS-2086.5	2086	15000	Diesel
UST	SS-2091.1	2091	10000	Diesel
UST	SS-2091.2	2091	10000	Diesel

2.4.3 Support Site Oil and Hazardous Substance and Dangerous Waste Storage Facilities

The Support Site has two (2) TDW storage locations and four (4) HWAP, listed in Table 2-5 that are discussed in detail in this section due to the nature and quantity of materials stored and handled. A review of the AULs of all Oil and hazardous material storage locations indicates that none store oil and hazardous material in sufficient quantities that would produce a significant spill. These locations are listed in Table 2-6 since oil and hazardous material are frequently being handled both manually and by forklift, which increases the probability of containers being dropped.

Table 2-5 Support Site Temporary Deposit of Waste and Accumulation Points

HW SITE TYPE	FACILITY NUMBER	RESPONSIBLE OFFICE
TDW	2080	PW - Environmental
TDW	2082	Hospital
AP	2057	Elementary School
AP	2058	High School
AP	2076	MWR Auto Hobby Shop
AP	2092	NEX Autoport

2.4.3.1 PW Environmental (TDW) Building 2080

2.4.3.1.1 General Information

This storage location is used to consolidate waste prior to pick up by DRMO.

2.4.3.1.2 Spill Risk

Spill risk is from the handling of materials during transfer and consolidation.

2.4.3.1.3 Transfer

All transfers are done by hand and forklift.

2.4.3.1.4 Containment and Safety Equipment

Materials are stored within containment berms or in overpack drums Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.4.3.1.5 Drainage Control

This facility is located in drainage area F. The facility is designed to contain releases within the building.

2.4.3.1.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.3.1.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.3.2 Hospital (TDW) Building 2082

2.4.3.2.1 General Information

This storage location is used to consolidate waste prior to pick up by DRMO.

2.4.3.2.2 Spill Risk

Spill risk is from the handling and consolidation of materials.

2.4.3.2.3 Transfer

All transfers are done by hand.

2.4.3.2.4 Containment and Safety Equipment

Materials are stored within hazardous waste lockers with integral secondary containment. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.4.3.2.5 Drainage Control

This facility is located in drainage area F. The facility is designed to contain releases within the storage locker. Uncontained spills outside of the lockers could enter the storm drain system.

2.4.3.2.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.3.2.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.3.3 Elementary School (AP) Building 2057

2.4.3.3.1 General Information

The elementary school stores and uses various hazardous materials and generates dangerous waste.

2.4.3.3.2 Spill Risk

Spill risk is from the handling and consolidation of materials.

2.4.3.3.3 Transfer

All transfers are done by hand.

2.4.3.3.4 Containment and Safety Equipment

Materials are stored within lockers and storerooms within building 2057. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.4.3.3.5 Drainage Control

This facility is located in drainage area B. Spills would be contained within the building.

2.4.3.3.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.3.3.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.3.4 High School (AP) Building 2058

2.4.3.4.1 General Information

The high school stores and uses various hazardous materials and generates dangerous waste.

2.4.3.4.2 Spill Risk

Spill risk is from the handling and consolidation of materials.

2.4.3.4.3 Transfer

All transfers are done by hand.

2.4.3.4.4 Containment and Safety Equipment

Materials are stored within lockers and storerooms within building 2058. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.4.3.4.5 Drainage Control

This facility is located in drainage area B. Spills would be contained within the building.

2.4.3.4.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.3.4.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.3.5 Morale, Welfare and Recreation (MWR) Auto Hobby Shop (AP) Building 2076

2.4.3.5.1 General Information

The auto hobby shop stores and uses various hazardous materials and generates dangerous waste.

2.4.3.5.2 Spill Risk

Spill risk is from the handling and consolidation of materials.

2.4.3.5.3 Transfer

All transfers are done by hand.

2.4.3.5.4 Containment and Safety Equipment

Materials are stored within the maintenance bays of building 2076 and a fenced area outside of the building. This accumulation area is not designed with adequate secondary containment. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.4.3.5.5 Drainage Control

This facility is located in drainage area A. Spills in the maintenance bays would be contained within the building. Spills in the accumulation area would easily enter the storm drain system and exit the facility via the single outfall.

2.4.3.5.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.3.5.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.3.6 Naval Exchange (NEX) Auto Port (AP) Building 2092

2.4.3.6.1 General Information

The auto port stores and uses various hazardous materials and generates dangerous waste.

2.4.3.6.2 Spill Risk

Spill risk is from the handling and consolidation of materials.

2.4.3.6.3 Transfer

All transfers are done by hand.

2.4.3.6.4 Containment and Safety Equipment

Materials are stored within the maintenance bays of building 2092 and a fenced area outside of the building. This accumulation area is not designed with adequate secondary containment. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.4.3.6.5 Drainage Control

This facility is located in drainage area A. Spills in the maintenance bays would be contained within the building. Spills in the accumulation area would easily enter the storm drain system and exit the facility via the single outfall.

2.4.3.6.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.4.3.6.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.4.3.7 Other Support Site Hazardous Substance Storage Location

The following table is a list of other hazardous material storage locations that pose a spill risk from leaking containers or from spills during container handling, but *would not* cause a significant spill by definition. Hazardous material storage locations and general area spill direction and receptors are indicated on the site map provided in Appendix C.

Table 2-6 Other Support Site Hazardous Substance Storage Locations

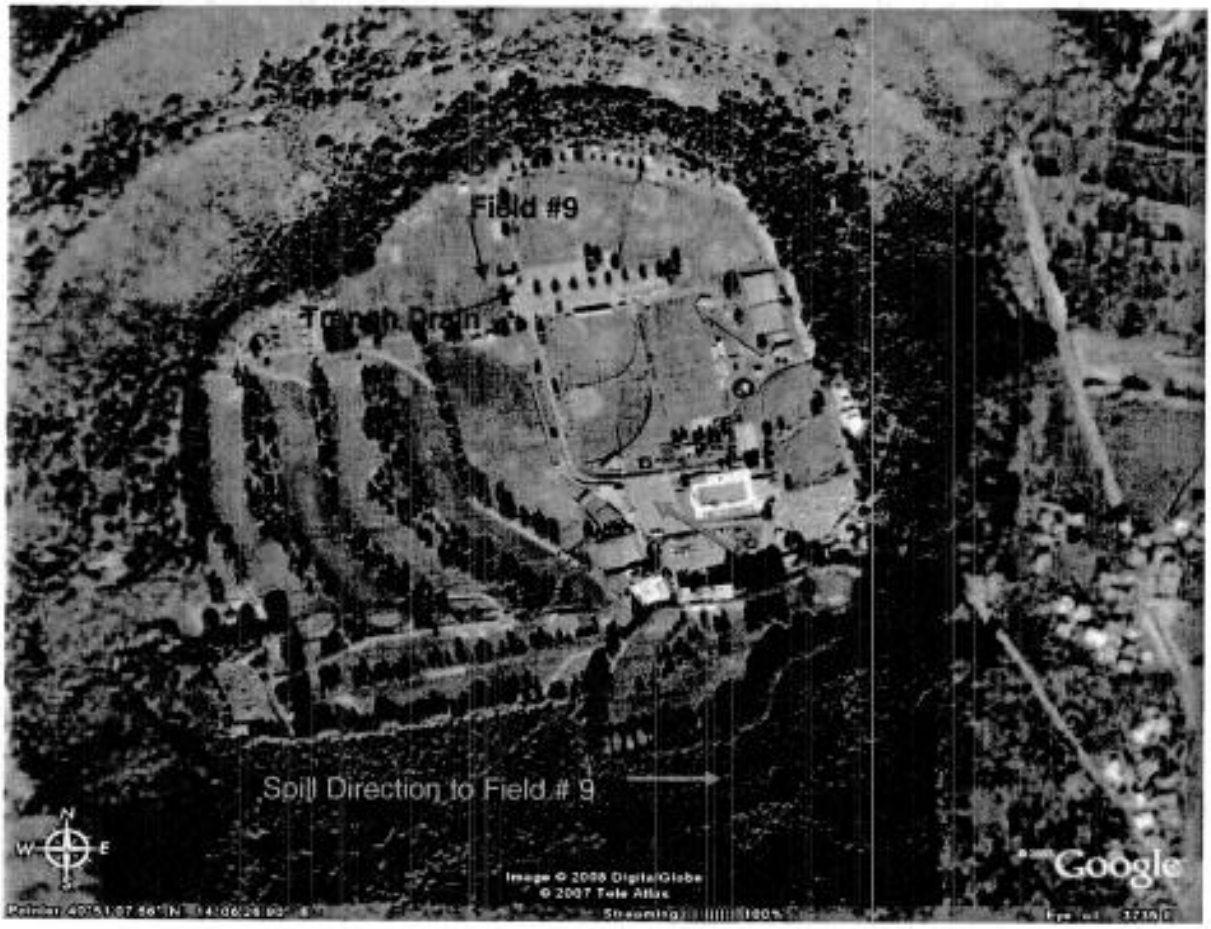
Building Number and Tenant
Building 2082 – Hospital Boiler/Generator Building
Building 2089 – Swimming Pool
Building 2091 – Commissary/Exchange Warehouse

2.5 Carney Park

2.5.1 General Drainage Information

There is no drainage plan for Carney Park. Drainage at this location consists of sheet flow from areas of higher elevation to a low point trench drain located at playing Field #9 where it percolates into the soil via a leach field collection pit.

Figure 2-6 Carney Park Aerial View



2.5.2 Carney Park POL Facilities

The following sections discuss facilities that regularly store, handle, and/or transfer POL that have the potential to cause a significant spill. Photos and site drawings are provided in Appendix H.

2.5.2.1 AST CP-522

2.5.2.1.1 General Information

This is a 3000 liter, horizontal cylinder steel AST that contains diesel fuel for heating in building 522.

2.5.2.1.2 Spill Risk

Spills from this tank would be from a catastrophic failure of the tank and secondary containment structure or from overfills not captured in the containment.

2.5.2.1.3 Transfer

This tank is filled from a fuel truck and all filling operations are constantly monitored. This tank does have a level gauge by which fuel level may be monitored during filling operations.

2.5.2.1.4 Containment and Safety Equipment

The secondary containment for this tank is adequate. Clean up and safety equipment is not required at this tank location.

2.5.2.1.5 Drainage Control

A spill from this facility would drain via sheet flow to the stormwater collection trench at playing Field #9 where it percolates into the soil via a leach field collection pit.

2.5.2.1.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.5.2.1.7 Security

The tank is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.5.2.2 Other Carney Park POL Storage Tanks

The following table is a list of POL USTs that pose a spill risk from overfills or if leaking would contaminate subsurface soils, but would not cause a significant spill by definition. Tank locations and

general area spill direction and receptors are indicated on the site map provided in Appendix C. Detailed information on these USTs, including photos and site drawings, is provided in the STMP dated July 2006.

Table 2-7 Carney Park POL USTs

Type of Tank	Tank Number	Building	Nominal Capacity (L)	Type of Oil
UST	CP-514	514	4000	Diesel
UST	CP-528	528	3000	Diesel
UST	CP-545	545	3000	Diesel
UST	CP-550	550	3000	Diesel

2.5.3 Carney Park Oil and Hazardous Substance and Dangerous Waste Storage Facilities

Carney Park has one (1) HWAP that is discussed in detail in this section due to the nature and quantity of materials stored and handled. A review of the AULs of all oil and hazardous material storage locations indicates that none store oil and hazardous material in sufficient quantities that would produce a significant spill. These locations are listed in Table 2-8 since oil and hazardous material are frequently being handled both manually and by forklift, which increases the probability of containers being dropped.

2.5.3.1 MWR (AP) Building 516

2.5.3.1.1 General Information

MWR stores dangerous waste generated from golf course and recreational area maintenance operations.

2.5.3.1.2 Spill Risk

Spill risk is from the handling and consolidation of materials.

2.5.3.1.3 Transfer

All transfers are done by hand.

2.5.3.1.4 Containment and Safety Equipment

Materials are stored in a covered area with a secondary containment. Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.5.3.1.5 Drainage Control

A spill from this facility would drain via sheet flow to the stormwater collection trench at playing Field #9 where it percolates into the soil via a leach field collection pit.

2.5.3.1.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.5.3.1.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.5.3.2 Other Carney Park Hazardous Substance Storage Location

The following table is a list of other hazardous material storage locations that pose a spill risk from leaking containers or from spills during container handling, but *would not* cause a significant spill by definition. Hazardous material storage locations and general area spill direction and receptors are indicated on the site map provided in Appendix C.

Table 2-8 Other Carney Park Hazardous Material Storage Locations

Building Number and Tenant
Building 516 – MWR Maintenance
Golf Course Equipment and Storage Area

2.6 Lago Patria

2.6.1 General Drainage Information

There is no drainage plan in the SWPPP for Lago Patria. Drainage at this location consists of stormwater collection via storm drains which discharge off the facility into drainage ditches off site. The ultimate receptor from these ditches is unknown. There is new construction underway at this location, which will alter site drainage patterns once completed.

Figure 2-7 Lago Patria Aerial View

2.6.2 Lago Patria POL Facilities

There are no aboveground storage tanks at this facility. There are two 15000 liter diesel USTs (LP-10.1 and LP10.2) that provide fuel for emergency generators located in building 10. These tanks pose a spill risk from overfills or if leaking would contaminate subsurface soils, but would not cause a significant spill by definition. Tank locations and general area spill direction and receptors are indicated on the site map provided in Appendix C. Detailed information on these USTs, including photos and site drawings, is provided in the STMP dated July 2006.

2.6.3 Lago Patria Oil and Hazardous Substance and Dangerous Waste Storage Facilities

Lago Patria has three hazardous material storage locations that pose a spill risk from leaking containers or from spills during container handling, but *would not* cause a significant spill by definition. There are two storage areas located in building 10 and several hazardous substance and dangerous waste storage lockers located in the compound. Hazardous material storage locations and general area spill direction and receptors are indicated on the site map provided in Appendix C.

2.7 Camaldoli

2.7.1 General Drainage Information

There is no drainage plan in the SWPPP for Camaldoli. Drainage at this location consists of stormwater collection via storm drains which discharge off the facility into drainage ditches off site. The ultimate receptor from these ditches is unknown.

2.7.2 Camaldoli POL Facilities

The following sections discuss facilities that regularly store, handle, and/or transfer POL that have the potential to cause a significant spill. Photos and site drawings are provided in Appendix H.

2.7.2.1 AST CM-69

2.7.2.1.1 General Information

This is a 3785 liter, rectangular concrete encase AST that contains diesel fuel for the emergency generators in building 69.

2.7.2.1.2 Spill Risk

Spills from this tank would be from a catastrophic failure of the tank and secondary containment structure or from overfills not captured in the containment.

2.7.2.1.3 Transfer

This tank is filled from a fuel truck and all filling operations are constantly monitored. This tank does have a level gauge by which fuel level may be monitored during filling operations.

2.7.2.1.4 Containment and Safety Equipment

The secondary containment for this tank is adequate. Clean up and safety equipment is not required at this tank location.

2.7.2.1.5 Drainage Control

A spill from this facility would most likely collect on the ground adjacent to the tanks. There are no storm drains at this location.

2.7.2.1.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.7.2.1.7 Security

The tank is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.7.3 Camaldoli Oil and Hazardous Substance and Dangerous Waste Storage Facilities

Camaldoli is an dangerous waste accumulation point that pose a spill risk from leaking containers or from spills during container handling, but *would not* cause a significant spill by definition. There are several hazardous material storage lockers located in the compound. Hazardous material storage locations and general area spill direction and receptors are indicated on the site map provided in Appendix C.

2.8 Teverola

2.8.1 General Drainage Information

The site drainage map, Appendix C for Teverola indicates two stormwater drainage outfalls that enter the public stormwater drain system outside of the compound. There is no government owned POL storage tanks at this location.

Figure 2-8 Teverola Aerial View

2.8.2 Teverola Oil and Hazardous Substance and Dangerous Waste Storage Facilities

Teverola is an dangerous waste accumulation point that pose a spill risk from leaking containers or from spills during container handling, but *would not* cause a significant spill by definition. There is several

hazardous material storage lockers located in the compound. Hazardous material storage locations and general area spill direction and receptors are indicated on the site map provided in Appendix C.

2.9 Gaeta Pier Area

2.9.1 General Drainage Information

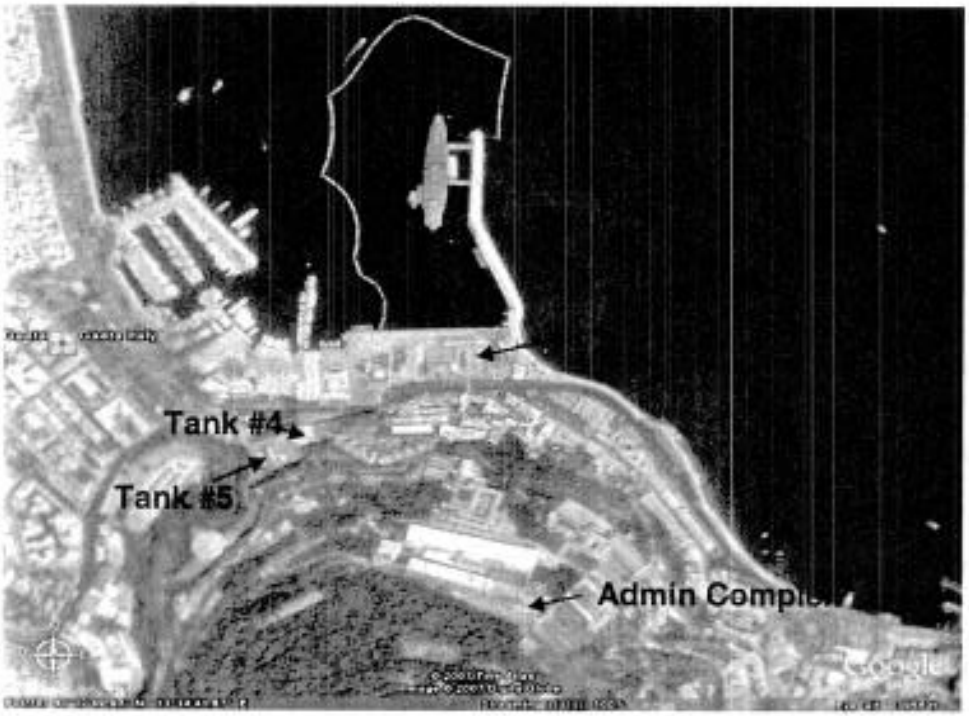
There is no drainage plan in the SWPP for this location. Stormwater will drain via sheet flow directly into Gaeta Bay.

2.9.2 Gaeta Pier POL Facilities

2.9.2.1 General Information

There are two bulk field constructed underground storage tanks (Tank #4 and Tank#5) being leased by Defense Energy Support Center (DESC) from the Italian Navy (Figure 2-9). These one million gallon tanks contain diesel fuel marine, used to transfer fuel via approximately 748 meters of pipeline to ships berthed at the pier. The tanks and pipeline are operated and maintained by the Italian Navy.

Figure 2-9 Gaeta Complex Aerial View



2.9.2.2 Spill Risk

Spills from these tanks would be from a catastrophic failure of the tank or from overfills. A release from the transfer pipeline would be due to a rupture or from leaking valves.

2.9.2.3 Transfer

These tanks are filled by tanker ship using the pier pipeline. These tanks have a level gauge by which fuel level may be monitored during filling operations. Fueling operations are continually manned.

2.9.2.4 Containment and Safety Equipment

The tanks, which are cut and cover tanks, are located within a concrete berm. Clean up and safety equipment is located in the pier complex.

2.9.2.5 Drainage Control

A spill from the tanks or pipeline would flow directly into the Bay of Gaeta.

2.9.2.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.9.2.7 Security

The tank and pier area are well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.9.3 Gaeta Pier Area Oil and Hazardous Substance and Dangerous Waste Storage Facilities

2.9.3.1 General Information

There is several hazardous storage lockers located on the pier wharf. These are to be relocated inside a building currently being refurbished.

2.9.3.2 Spill Risk

Spill risk is from the handling of materials during transfer and consolidation.

2.9.3.3 Transfer

All transfers are done by hand and forklift.

2.9.3.4 Containment and Safety Equipment

Materials are stored within containment berms or in overpack drums Spill kits, PPE, fire extinguishers, and clean up equipment are located at this facility.

2.9.3.5 Drainage Control

The facility is designed to contain releases within the building.

2.9.3.6 Spill Response Strategies

The spill response strategy is discussed in the IMH, volume I, Sections 1 and 5 of this plan.

2.9.3.7 Security

This area is well lighted and the entire facility is located on a secured, fenced-in military base with security 24 hours a day for 365 days a year.

2.10 Deficiencies and Corrective Actions

The following table lists deficiencies noted and corrective actions required.

Table 2-9 Deficiencies and Corrective Actions

Facility Deficiency	Corrective Action
CAPODICHINO	
The location of the government gas station at the east parking garage entrance, building 461, is a collision hazard. Vehicles often use the entrance as an exit with near collisions occurring with entering vehicles and vehicles being fueled.	At a minimum vehicle traffic should be restricted during any fueling operation of government vehicles and while the USTs are being filled by tanker truck. Consideration should be given to relocating the gas station or closing this entrance and providing another entrance into the garage. Cost can not be estimated at this time.
There is no mechanism in place to stop a large POL release from leaving the facility via the stormwater drainage system and the single outfall.	Consideration should be given to installing control valve at the stormwater outfall.
SUPPORT SITE	
AST SS-2075 has inadequate secondary containment.	Provide adequate secondary containment. Cost $500.
There is no mechanism in place to stop a large POL release from leaving the facility via the stormwater drainage system and the single outfall.	Consideration should be given to installing control valve at the stormwater outfall.
The oil drums stored in the fenced area behind building 2091 are not stored on secondary containment pallets provided.	Ensure that containment pallets are utilized for oil drums stored outside in this location.

3.0 SPILL CONTROL & RESPONSE MANAGEMENT

This section details OHS spill control policies, procedures, and responsibilities. Provisions, responsibilities, procedures, notifications, surveillance, cleanup methods, other resources including public affairs methods for releasing public information in the event of a spill as required by section 18.2.2 of the FGS are included in this section for the purpose of spill response management. Additional requirements of FGS section 18.2.2 are shown in the IMH and section 2 of this volume II.

3.1 NSA Naples OHS Spill Response Organization and Responsibilities.

The Commanding Officer (CO) of NSA Naples is designated as the Facility Incident Commander (FIC), and heads the NSA Naples OHS spill response organization. By this instruction, the CO has designated the NSA Naples Fire Chief (FC) to act as Facility Incident Commander when required. In case of an OHS pollution incident, On-Scene Incident Commanders (OSICs) are designated to manage response operations at the field-level. On-Scene Incident Commanders are designated on the basis of the nature of the spill, and subject matter requirements. For the NSA Naples AOR designated On-Scene Incident Commanders are:

- NSA: Initial response and general OHS land spills: NSA FD
- Gaeta Complex: OHS spills: CSO
- Off-base: OHS spills NSA FD

See Figure 3-1 and Figure 3-2, for an overview of the NSA Naples Spill Management Team response process and organization; and for the NSA Naples response organization recall bill.

NSA Response Organization

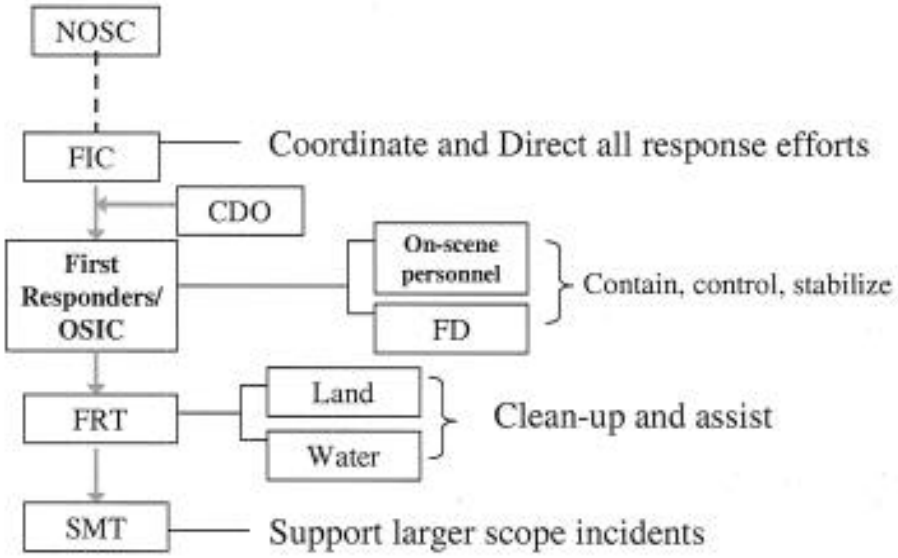
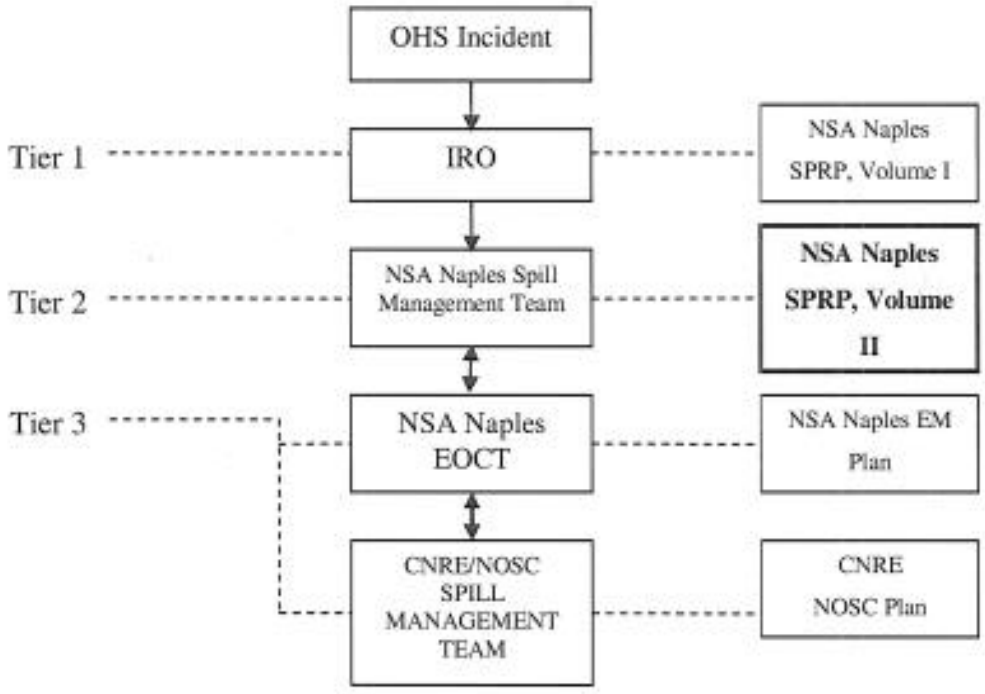


Figure 3-1 Basic NSA OHS Spill Response Organization

Procedures and responsibilities for initial OHS emergency response operations under the NSA Naples Initial Response Organization are detailed in NSA Naples Incident Management Handbook (IMH) Spill Prevention and Response Plan, Volume I. The IMH also shows a detail of the responsibilities, composition, alert and response, including roster and telephone number, of the First Responders also referred to as Facility Response Team (FRT) and other responsible parties such as the FIC, Installation Commander and local authorities, emergency services providers; training requirements can be found in section 5 of this document.

NSA Naples OHS incident response will be managed at the Spill Management Team and field-levels, with the capability to manage large-scale events utilizing most efficient command post facilities, trained response teams, other installation assets, and outside resources. In the event of a command-level mobilization, the NSA Naples Emergency Management Organization requires the activation of the command Emergency Operations Center (EOC) which will either link to an on-going Spill Management Team effort; or incorporate incident management into the EOC team.

Figure 3-2 NSA Naples OHS Incident Management Structure



In the event of an OHS pollution incident onboard NSA, the NSA Naples FD is notified and immediately responds to the scene. FD initiates life safety, fire **suppression**, spill **control**, initial **containment**, and site **stabilization** measures, and acts as the initial On-Scene Incident Commander. If required, the senior fire official (SFO), as the initial On-Scene Incident Commander, is relieved by one of the designated subject matter On-Scene Incident Commanders, but only after the situation is stabilized, and there are no further acute threats to human health and safety. For spills in the Gaeta Complex, including piers and waters of Naples, the Installation Commander is the designated incident commander. If required to be relieved, the relieving On-Scene Incident Commander assesses the situation, assumes incident command, updates the incident action plan (IAP), and conducts response operations until successfully completed or relieved by proper authority. For OHS incidents due to DOD operations off-base, The Fire Department will maintain incident command of Navy assets. It is understood that U.S. Navy authorities have no authority off of its own property.

3.1.1 SPILL MANAGEMENT TEAM (Tier 2) Activation

In the event that an OHS spill incident requires additional support beyond initial response, the next level of response management, the NSA Naples Spill Management Team will be activated, and used to conduct

requisite operations. Detailed Spill Management Team guidance and supporting checklists are found in this Volume, Appendix I. Spill Management Team operations must be effectively coordinated with the all hazards requirements found in the NSA Naples Emergency Management Plan (NSA Naples INST 3440.17). This will ensure that response operations are most efficiently managed, while ensuring that NSA Naples can respond to a complex, multi-hazard emergency incident.

For most small to medium size spills that can be handled at the installation level, the NSA Naples Initial Response Organization is used to conduct response and incident management activities. The NSA Naples Facility Incident Commander will oversee and keep the NOSC informed of operations through the normal reporting system.

For larger spill response operations the activation of the NSA Naples Spill Management Team may be directed. Reasons for activating include:

- Increasing magnitude of the incident
- Necessity of a Unified command with non-U.S. Navy entities
- Extended response required

3.1.2 NOSC Support (Tiers 2 & 3)

If the spill cannot be handled by NSA Naples resources, the Facility Incident Commander may request assistance from CNRE, as the Navy On-Scene Coordinator (NOSC). If necessary, the NOSC may activate/request other Navy, Italian, and/or commercial response resources, and activate the CNRE Spill Management Team, including technical specialists from within the Command, e.g., medical, supply and public affairs. That support may be in the form of particular resource elements up to full assumption of incident management. The most likely NOSC support will be at the resource element level, i.e. additional boom, personnel, disposal support, as it is NOSC and Navy policy to manage incidents at the local level when at all possible.

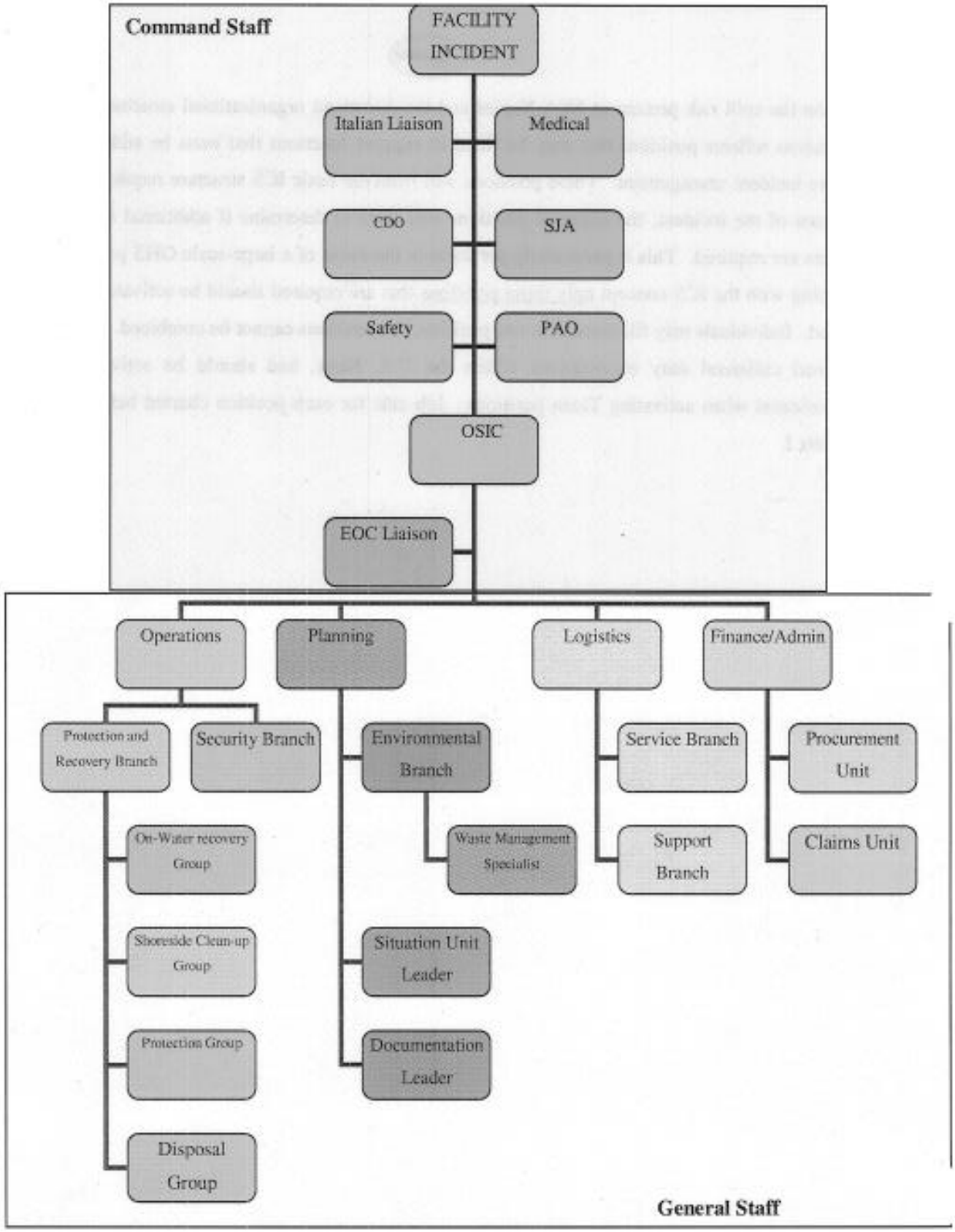
3.2 Incident Command System Information

Complete Incident Command System guidance, description, and forms for the spill management response can be found at the FEMA website: http://www.training.fema.gov.

3.3 SPILL MANAGEMENT TEAM Structure & Staffing

Based on the spill risk present at NSA Naples and the command organizational structure, the following organization reflects positions that may be filled to support functions that must be addressed to ensure effective incident management. These positions will from the basic ICS structure required, but based on the nature of the incident, the assigned positions will have to determine if additional subordinate staff members are required. This is particularly pertinent in the event of a large-scale OHS pollution incident. In keeping with the ICS concept only those positions that are required should be activated and personnel assigned. Individuals may fill more than one position, but positions cannot be combined. This is contrary to normal collateral duty expectations within the U.S. Navy, and should be actively trained and communicated when activating Team positions. Job aids for each position charted below are found in Appendix I.

Figure 3-3 NSA Naples Spill Management Team Organization



Office	Spill Management Team Position	Phone ##
Emergency Management Officer	EOC	626-5057
CO/XO/CSO	Facility Incident Commander 24 hour # call CDO: 39-081-568-5547 DSN: 626-5547	626-6289/5402
Senior Fire Officer (SFO)	Facility Incident Commander (When active)	911
Public Affairs Office (PAO)	Public Affairs Officer (PAO)	625-5907
Executive Agent	HN Liaison Officer	626-5176
Staff JAG	Legal Officer	626-5360
NSA Naples Safety	Safety Officer	626-4857
Naples Hospital	Medical Officer	629-6155/6
Operations Officer	Operations Section Chief	626-5116
As assigned	Protection and Recovery Branch Director	As assigned
Security	Security Branch Director	As assigned
As assigned	EOC Liaison	626-5411
PWO	Planning Section Chief	626-4653
Environmental	Situation Unit Leader	626-6641
As assigned	Documentation Unit Leader	As assigned
NSA Supply Officer	Logistics Section Chief	As assigned
As assigned	Service Branch Director	As assigned
As assigned	Support Branch Director	As assigned
NSA Business Director	Finance/Admin Section Chief	As assigned
As assigned	Procurement Unit Leader	As assigned
As assigned	Claims Unit Leader	As assigned

KEY

Command Staff	Operations	Planning	Logistics	Finance/Admin

Each primary Spill Management Team member assigned shall maintain a current contact or recall list for those personnel required to fulfill their responsibilities, including staffing their Section/Branch/Unit and relief coverage.

3.4 SPILL MANAGEMENT TEAM Operations

NSA Naples is mandated by U.S. Navy policy to use an ICS organization consistent with the National Incident Management System (NIMS) when responding to OHS spills. This command structure is designed to be compatible with the facility's standard command organization and allows for improved communications and integration with Italian authorities, and other potential response support organizations. It also facilitates seamless integration with multi-hazard incident management when the NSA EOC is activated, and the OHS incident is a consequence of another crisis.

ICS is functionally similar to standard Navy emergency organizations, providing a consistent, effective framework for conducting contingency operations by managing functions, tasks, and resources.

The ICS organization is designed to expand or contract readily, as required, to effectively manage the spill response. This flexibility provides for the most efficient use of resources through effective management of functions and tasks, at an appropriate level. The ICS allows the response organization to quickly adapt to all types of emergencies, expanding and contracting as conditions warrant. Spills of a large magnitude may mandate that a more complex ICS organization be mobilized, while minor discharges may be effectively supported by a few select functions. For example, for small spills, the On-Scene Incident Commander will manage all section functions, while for large incidents; key sections such as Operations, Planning and Logistics may need to be fully staffed.

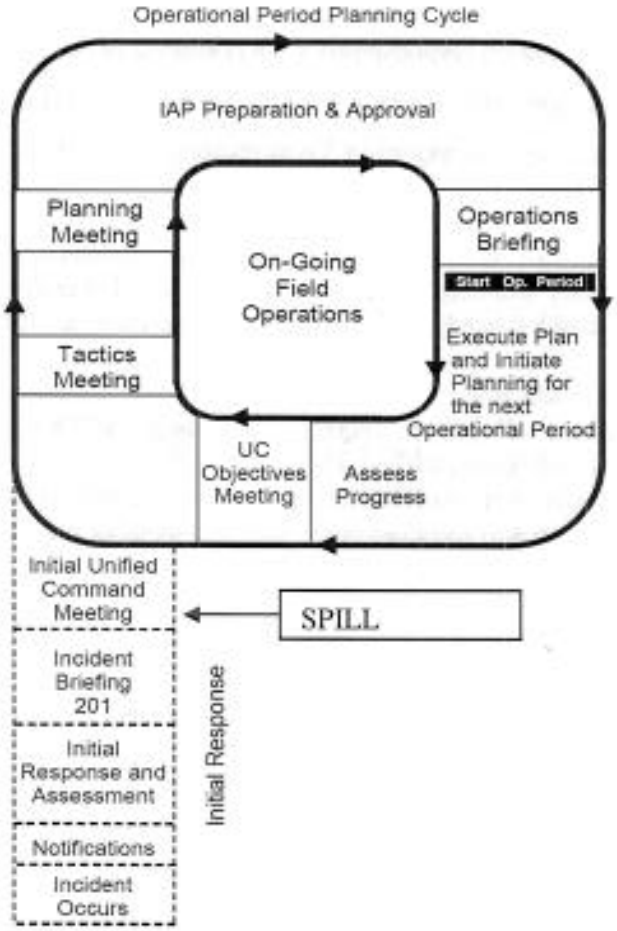
Use of the basic ICS form 201 (Volume I, Section 6) will be utilized as the initial incident action plan (IAP) and incident briefing tool for activating, and transitioning to Spill Management Team operations.

OHS incident response management requirements, strategies, and procedures are detailed in the IMH Volume I.

3.4.1 Management Process- Planning and Meetings

Due to the multi-operational period nature of Spill Management Team operations, the NSA Naples process will follow, as appropriate, the general flow of the "Planning P" as contained in ICS guidance and pictured below. Use of the "P" cycle requires familiarity and prior preparation, which should be developed and exercised during periodic training. Figure 3-4 illustrates the Planning P.

Figure 3-4 NSA Naples Planning "P"



3.4.2 SPILL MANAGEMENT TEAM Organization & Responsibilities

The Spill Management Team is inter-disciplinary, composed of personnel from various departments with the expertise required to fill key response organization positions.

In the event that an OHS response is part or consequence of a multi-hazard incident, the Spill Management Team will continue to function in its pollution management role, and be linked physically or electronically to the EOC Team.

3.4.2.1 General

Specific Spill Management Team position responsibilities are contained in the corresponding job aids and response checklists contained in Appendix I, which shall be used to conduct Spill Management Team operations. All personnel assigned Spill Management Team responsibilities shall:

- Familiarize themselves with their responsibilities, and predetermine what forms, plans, references, and support they will need to carry out their duties. These are known as "Tools of the Trade", and must be assembled in advance and easily transported to a spill management site, i.e. a "Fly-away Kit".
- Will respond as soon as practicable.
- Staff the Spill Management Team as, required, including 24/7/365 coverage, if necessary. Response team members will have qualified designated backups.
- Maintain current contact phone number information for the Quarterdeck/Command Duty Officer.
- Document their actions to support response operations and incident documentation.
- Participate in periodic training sessions, including:

    - Spill Prevention and Response Plan Training
    - Annual Tabletop exercise (TTX)
    - Annual ICS Training
    - Position-specific Training (As announced)

3.5 Command Staff

The Command Staff reports directly to the Facility Incident Commander and the Deputy Facility Incident Commander. Members of the Command Staff are also available as advisors in their specialties to the Facility Incident Commander and functional section chiefs. The duties of the staff are listed in the following subsections, and are shown in Figure 3-5.

Figure 3-5 NSA Naples Command Staff Organization

3.5.1 Safety Officer

The Safety Officer is responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety. The Safety Officer will correct unsafe acts or conditions through the regular line of authority, although he may exercise emergency authority to stop or prevent unsafe acts when immediate action is required. The Safety Officer maintains awareness of active and developing situations, ensures the preparation and implementation of the Site Safety Plan, and includes safety messages in each Incident Action Plan. The Safety Officer is responsible for preparing an effective site safety plan (Appendix J), and maintaining it in a current state.

3.5.2 Staff Judge Advocate (Legal Officer)

The Staff Judge Advocate (SJA) provides legal advice to the Facility Incident Commander on all aspects of response operations. The potential for extensive liability and claim damages requires that the SJA be prepared to advise on claims filing procedures, documentation requirements, and permitting regulations. The Staff Judge Advocate provides liaison with the Office of the Judge Advocate and other Navy legal resources.

3.5.3 Public Affairs Officer (PAO)

The Public Affairs Officer is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. The coordination of information release is vital to avoid public confusion and adverse impact on response/recovery operations, particularly in a foreign nation. The PAO will plan and coordinate VIP arrangements establishing a protocol office when required. The activity's emergency public affairs plan is located in Appendix L.

3.5.4 Italian (HN) Liaison Officer

OHS pollution incidents and potential negative impacts may be very sensitive issues to local and national foreign authorities. It is essential that appropriate information is shared in a timely manner, and that the host nation is fully involved throughout the response and remediation. There are many Italian government agencies that may have an interest in and capabilities to assist response operations that are not otherwise included in the Incident Command System. The Italian Liaison Officer, through the Italian Base Commander, will provide liaison with those agencies and convey information, requests, and legally constituted directives to the Incident Commander and Section Chiefs.

3.5.5 Medical Officer

The Medical Officer is primarily responsible for ensuring that a Medical Emergency Plan is developed, medical aid and transportation for injured and ill incident personnel is provided, and appropriate reports and records are prepared. Naval Hospital, Naples will ensure an appropriate representative fills this position. In the case of a large-scale incident with significant casualties, the clinic will work within the NSA emergency management plan, and the EOC Medical Officer will provide coordination with Spill Management Team operations. The Medical Unit may also assist Operations in supplying medical care and assistance to civilian casualties at the incident, but is not intended to provide medical services to the public.

3.5.6 Command Duty Officer (CDO)

The NSA CDO will serve as command liaison and crisis monitor in the event of a significant OHS spill incident, as detailed in the NSA Emergency Management Plan. The CDO will assist in coordinating

participation of various NSA Departments and activities. The CDO will also be responsible for external reporting through the CO/XO.

3.5.7 EOC Liaison

In the event of a large-scale or multi-hazard incident response where the NSA Naples EOC is activated, but the Spill Management Team continues operations, a liaison from the Spill Management Team will be assigned to the EOC. The responsibilities of this position will be to ensure effective communications are established and maintained, coordinate information exchange between the EOC and Spill Management Team, and serve as a technical advisor to the EOC. Normally, the liaison will be provided by the Emergency Management Officer or Operations Section to facilitate efficient and technically accurate updates on on-going operations.

3.6 General Staff - Functional Sections

The duties and responsibilities of the functional sections are introduced below.

The **Operations Section** directs and coordinates all tactical operations within the response area.

It assists the **Planning Section** in defining response goals and objectives (detailed in the incident action plan), assesses potential impacts, develops mission assignments and schedules to accomplish objectives, identifies resource requirements, and as appropriate, recommends release of resources. The **Planning Section** evaluates and documents the results of response operations, disseminating technical and environmental information to concerned parties.

The **Logistics Section** is responsible for supplying all resources required to carry out the response and to support continuing operations.

The **Finance/Admin Section** is responsible for handling all accounting services and personnel administrative matters.

3.7 Operations Section

The Operations Section carries out the direct spill response activities. It may be composed of multiple units, depending on the size and potential impact of the incident as shown in Figure 3-6. The Operations Section Chief plans, directs and coordinates all tactical operations within the response area.

Figure 3-6 NSA Naples Operations Section Organization

The Operations Section develops mission assignments and schedules to accomplish them. The Operations Section Chief identifies resource requirements, and evaluates and reports the results of response operations. Information provided by over-flights, site surveys, and spill impact and risk assessments is used by the Operations Section Chief to establish priorities in utilizing spill response assets on a day-to-day basis. Due to the unique nature and potential impacts of large oil spill pollution incidents, and the extensive existing HS emergency management spill expertise, the discussion on response operations under Operations focuses primarily on oil spill response methodology.

Spill Cleanup duties are performed by the appropriate Facility Response Team, coupled with other installation assets and contractor support as required and available. Containment methods are used to limit the spread of the spill, and to concentrate the spill, improving the effectiveness of the mechanical cleanup

equipment. Containment methods generally include the use of boom or sorbents to surround and collect the spilled substance and the use of diversionary booming or trenches to direct the spill to more favorable or natural collection points.

3.7.1 Operations Section Chief

The Operations Section Chief, a member of the General Staff, is responsible for managing all operations directly applicable to the primary mission. The Operations Section Chief activates and supervises elements in accordance with the Incident Action Plan and directs its execution; activates and executes the Site Safety and Health Plan; directs the preparation of unit operational plans; requests or releases resources; makes expedient changes to Incident Action Plans as necessary; and reports regularly to the Incident Commander.

3.7.1.1 Recovery & Protection Branch Director

The Recovery and Protection Branch Director is responsible to oversee and implement the protection, containment, and cleanup activities established in the Incident Action Plan, and as directed by the Operations Section Chief.

3.7.1.2 On-Water Recovery Group Supervisor (Gaeta)

The On-Water Recovery Group Supervisor is responsible for managing on-water recovery operations in compliance with the Incident Action Plan, and as directed by the Recovery and Branch Director. The Group may be further divided into Strike Teams, Task Forces, and single resources.

3.7.1.3 Shore-side Clean-up Group Supervisor (Gaeta)

The Shore-side Recovery Group Supervisor is responsible for managing shore-side cleanup operations in compliance with the Incident Action Plan, and as directed by the Recovery and Protection Branch Director. The group may be further divided into Strike Teams, Task Forces, and single resources.

3.7.1.4 Protection Group Supervisor

The Protection Group Supervisor is responsible for deploying containment, diversion, and absorbent boom in designated locations, in accordance with the Incident Action Plan and as directed by the Recovery and Protection Branch Director. Depending on the size of the incident, the Protection Group may be further divided into Strike Teams, Task Forces, and single resources.

3.7.1.5 Disposal Group Supervisor

Under the Recovery and Protection Branch Director, the Disposal Group Supervisor is responsible for coordinating the on-site activities of personnel engaged in collecting, storing, transporting, or disposing of waste materials. Depending on the size and location of the spill, the disposal groups may be further divided into Strike Teams, Task Forces, and single resources.

3.7.2 Security Branch Director

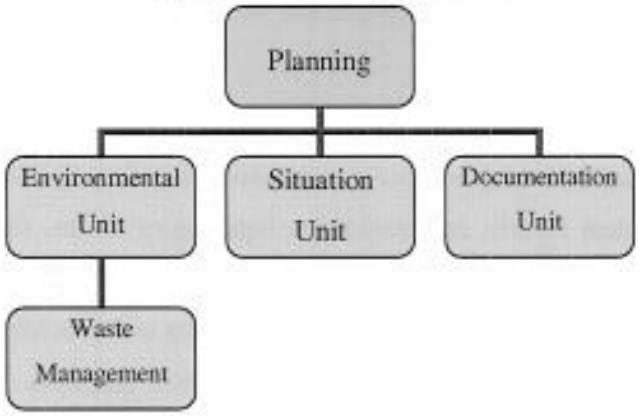
The Security Branch Director is responsible for coordinating and directing all law enforcement activities related to the incident, including but not limited to, isolating the incident, crowd control, traffic control, evacuation coordination, beach closures, and/or perimeter security. Under current threat conditions, this may be a complex function that will require coordination between land and water security assets. The Director will ensure the Operations Section Chief is kept informed of activities; and may update the Security Officer in the Command Staff directly, as appropriate.

3.8 Planning Section

The Planning Section is responsible for developing an Incident Action Plan defining response and operational goals and objectives. With the assistance of the Operations Section, the Planning Section assesses potential impacts; and develops mission assignments and schedules and identifies resource requirements to accomplish the defined goals. Alternative response strategies are evaluated by the Planning Section and incorporated into the Incident Action Plan on a case-by-case basis. The Planning Section is also responsible for documenting and disseminating all technical and environmental information to concerned parties, including updates on response actions and changes to the Incident Action Plan.

Finally, the Planning Section is responsible for recording all events and actions taken during the spill incident for future reference. The composition of the planning section is shown in Figure 3-6.

Figure 3-7 Planning Section



3.8.1 Planning Section Chief

The Planning Section Chief, a member of the General Staff, is responsible for collecting, evaluating, disseminating, and using information about the incident and status of resources. Information is needed to: 1) understand the current situation, 2) predict probable course of incident events, and 3) prepare alternative strategies for the incident.

3.8.1.1 Environmental Unit Leader

The Environmental Unit Leader is responsible for environmental matters associated with the response, including strategic assessment, modeling, surveillance, and environmental monitoring and permitting. The Environmental Unit prepares environmental data for dissemination. Technical Specialists may be assigned to the Environmental Unit include the Scientific Support Coordinator and Specialists for Sampling, Response Technologies, Trajectory Analysis, Weather Forecast, Resources at Risk, Shoreline Cleanup Assessment, Historical/Cultural Resources, and Waste Management. If uncertain as to the proper place to assign a technical specialist, put them in the Environmental Unit.

3.8.1.2 Situation Unit Leader

The Situation Unit Leader is responsible for collecting and evaluating information about the current and possible future, status of the spill and the spill response operations. This responsibility includes compiling information regarding the type and amount of oil spilled, the amount of oil recovered, the oil's current location, and anticipated trajectory, and impacts on natural resources. This also includes providing information to the GIS Specialist(s) for mapping the current and possible future situation, and

preparing reports for the Planning Section Chief. The Situation Unit Leader shall ensure that a clear, user friendly display of incident information is developed and accessible.

3.8.1.3 Documentation Unit Leader

The Documentation Unit Leader is responsible for maintaining accurate, up-to-date incident files such as: Incident Action Plan, incident reports, communication logs, injury claims, situation status reports, etc. Thorough documentation is critical to post-incident analysis. Some of these documents may originate in other sections. This unit will ensure each section is maintaining and providing appropriate documents. Incident files will be stored for legal, analytical, and historical purposes. The Documentation Unit coordinates duplication and copying services.

3.8.1.4 Waste Management Specialist

The Disposal (Waste Management) Specialist is responsible for providing the Planning Section Chief (coordinated with Operations and Logistics) with a Disposal Plan that details the collection, sampling, monitoring, temporary storage, transportation, recycling, and disposal of all anticipated response wastes.

The Waste Management Specialist coordinates waste collection, characterization, and disposal activities. However, large or controversial disposal operations should be discussed with the relevant Italian Authorities.

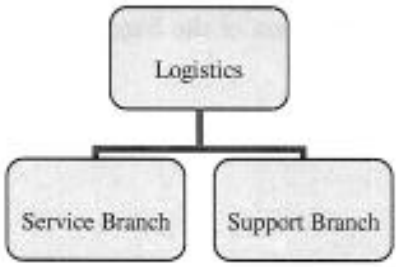
DRMO generally assumes responsibility for disposal of hazardous materials. The Environmental Unit coordinates actions with the Operations and Logistics Sections.

3.9 Logistics Section

The Logistics Section exists primarily to support the Operations and Planning Sections. Establishing an effective OHS response process requires that operations and logistics work as a unified team and combine their complimentary and mutually dependent functions into a single effort. Logistics support, particularly for a large pollution response operation, includes response personnel support for food services and berthing and all facets of equipment and material support including staging and general supply support. The magnitude of the effort will vary with the type of incident and the extent of Navy involvement in the cleanup. Pollution incidents on or near Navy activities may require little logistics support beyond the capabilities of the local activity. On the other hand, in remote areas, the Navy may have to seek extensive

support from commercial contractors, and SUPSALV. The makeup of the Logistics Section is shown in Figure 3-8.

Figure 3-8 Logistics Section Organization



3.9.1 Logistics Section Chief

The NSA Naples Logistics Section Chief is responsible for coordinating all logistics support for any response effort. The Logistics Section Chief communicates with responders to identify their needs and develops a strategic and comprehensive logistics plan. Procuring resources and positioning them based upon anticipated need will ensure cleanup. Merely reacting after the incident to requests from the operators may result in failure, or at the very least unnecessary expense. At a minimum, the Logistics Section Chief will be prepared to implement and periodically update a strategic plan to support the logistics functions highlighted in this chapter.

3.9.1.1 Service Branch Director.

The Service Branch Director, when activated, is under the supervision of the Logistics Section Chief, and is responsible for managing all service activities at the incident. The Branch Director supervises the operations of the Communications, Medical, and Food Units.

It is essential that coordinated communication management procedures are established that enable all personnel associated with the response organization to communicate effectively and efficiently. If additional communications systems are required, the Logistics Section shall coordinate procurement and distribution of additional equipment. While contractors are normally responsible for their own communications plans, the remote location of some OHS response incidents may require a single coordinated communications effort organized by NSA Naples.

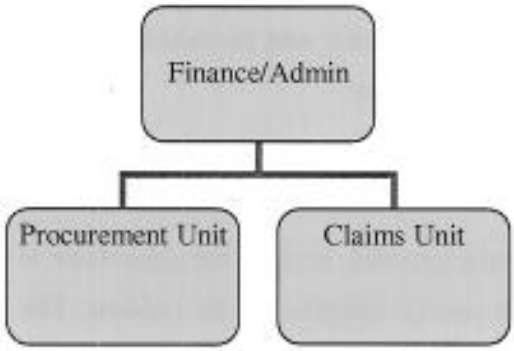
3.9.1.2 Support Branch Director.

The Support Branch Director, when activated, is under the direction of the Logistics Section Chief, and is responsible for developing and implementing logistics plans in support of the Incident Action Plan, including providing personnel, equipment, facilities, and supplies to support incident operations. The Support Branch Director supervises the operation of the Supply, Facilities, Ground Support, and Vessel Support Units.

3.10 Finance/Admin Section

The Finance/Admin Section, as shown in Figure 3-9, is responsible for handling all accounting services and personnel administrative matters. The Finance Section works closely with the Logistics Section to track all expenditures of the response operations. The Finance/Admin Section is lead by the Finance Section Chief and is assisted by the Procurement Unit Leader, Claims Unit Leader, and a Contract Coordinator, when assigned.

Figure 3-9 Finance/Admin Section Organization



3.10.1 Finance/Admin Section Chief

The Finance/Admin Section Chief is a member of the General Staff, and is responsible for all financial and cost analysis aspects of the incident and for supervising members of the Finance/Administration Section.

3.10.2 Procurement Unit Leader

The Procurement Unit Leader is responsible for administering all financial matters pertaining to vendor contracts.

3.10.3 Claims Unit Leader

The Claims Unit Leader is responsible for the overall management and direction of all administrative matters pertaining to compensation-for-injury and claims-related activity for an incident.

3.11 Typical Spill Management Team Actions by Position

The Spill Management Team and staff shall ensure that overall NSA Naples command response objectives are addressed throughout a response and supporting action planning, in addition to specific Facility Incident Commander's incident objectives. Command objectives include:

a. Ensure the Safety of Citizens and Response Personnel

b. Minimize impacts of the spill

c. Control the Source of the Spill

d. Protect Sensitive Areas-Environmental, Cultural, and Economic

e. Contain and Remove Spilled Material from the Environment

f. Manage Information and Intelligence

g. Maintain Mission Capability

The following items discuss typical Spill Management Team management functions and actions, but are not all-inclusive. The discussions are designed to provide an overview of the type of actions that are commonly required during a significant OHS pollution response to guide Spill Management Team members to better understanding their roles.

3.11.1 Operations Section

3.11.1.1 Initial Assessment

An initial assessment of the spill site is performed by the spill cleanup response team and is part of the turnover brief from whichever team is being relieved or enhanced. This assessment shall be provided to

the Facility Incident Commander, and at the appropriate Spill Management Team meetings. This analysis determines the size and location of the incident, the nature and status of source control operations, and the status and adequacy of response operations. Initial impacts of the spill may also be known at this time, and should be taken into consideration. The Operations and Planning Section Chiefs may also provide additional information on the initial status of the spill.

3.11.1.2 Response Methods

Once the trajectory and time of potential impacts of the spill are predicted, response actions are considered and prioritized in order to prevent these impacts from occurring. Prioritization of these response actions should take into account recommended actions from the applicable Italian authorities. The Operations and Planning Sections assist the Facility Incident Commander in developing this prioritized list of actions, giving updates of response actions performed during the emergency phase. A schedule is then developed to complete the prioritized list of response actions.

For POL spills, the primary method of spill cleanup used by the Navy is mechanical recovery that includes the use of skimmers, sorbents, pumps, and temporary storage devices. However, other response methods are available which may be more productive under certain circumstances. These alternative response methods include bioremediation and dispersant use. The Environmental Unit Leader must consult with the applicable Italian authorities before using any alternative response methods.

Shore-side cleanup activities produce the largest volumes of contaminated waste materials. To reduce the volume of waste, the removal of debris from beaches and areas likely to be affected by the spill before the spill reaches these areas, should be considered. These actions considerably reduce the waste stream, and simplify the beach cleanup operation. These issues should be addressed in the Disposal Plan prepared by the Operations and Planning Sections.

Dispersants are an alternative response method. Dispersants contain surfactants, which with the proper concentration and mixing energy, cause droplets of oil to break off from the slick. Certain products may be harmful in some environmentally sensitive environments. The Environmental Unit should be aware of which dispersants are approved for use in the region. However, due to the low viscosity of most Navy fuels, chemical dispersants are not available at Navy activities, since they are generally not suitable for use on Navy fuels. The Italian authorities must authorize the use of dispersants.

Bioremediation uses nutrients to enhance the activity of indigenous organisms and/or the addition of naturally occurring non-indigenous organisms. In the case of an oil spill, the addition of nutrients can enhance the degradation of the spilled oil.

Volatile fuels such as MOGAS should never be contained in a location where there is a risk of fire or ignition, and the use of a protective blanket of AFFF or other foam should be given early consideration. One response alternative for a spill of this type may be to permit the natural evaporation and dispersion of the fuel.

Periodically during the cleanup, and again at the end of operations, all personnel and equipment must be decontaminated, i.e., all oil and hazardous substances must be removed from all personnel and equipment. Decontamination agents (chemical) and methods (cold/hot pressure wash, chemicals, etc.) must be selected with care to ensure compliance with local, state, and federal regulations that address the use and final disposal of approved cleaning agents. Decontamination activities should be carried out in a large, open or well-ventilated area where materials handling equipment can easily move about and the necessary cleaning equipment and cleaning pools can be set up. Ideal sites include large parking areas, oily waste/OWS working areas, hangars, or runway areas.

3.11.1.3 Incident Action Plan (Operations)

After the initial incident briefing meeting, the Environmental Unit, in close coordination with the Facility Incident Commander and the Operations Section begins to update and enhance the Incident Action Plan. This plan is organized to present information on manpower, equipment and support resources needed to meet specific response and operational goals based on the information from the initial incident briefing meeting. During the first few days of the spill event, the Operations and Planning Sections provides updates on response actions performed during the emergency phase and input for developing the plan. Once this plan is developed, implementation of the plan can begin, moving response operations into the project phase. Once the Incident Action Plan is put into place, it continues to develop and expand, becoming more specific as response operations proceed. Any changes to the Incident Action Plan are documented and disseminated to the appropriate individuals by the Environmental Planning Branch.

3.11.2 Planning Section

3.11.2.1 Potential Impacts

Based on the initial analysis, the potential impacts of the spill can be determined. The Facility Incident Commander or Italian authorities should be referred to for listed sensitive areas and protection priorities. In general, the following should be taken into consideration in order to determine the potential impacts of the spill:

- Proximity of spill to populated areas and potential impacts on human health and safety
- Potential impact area of the spill, due to its size and trajectory
- Sensitive areas (and types) within the spill footprint and trajectory
- Shoreline types within impact area and trajectory
- Wildlife concentrations in impact area and trajectory.

Once the locations of potential impacts are established, the amount of time for each area to be impacted should also be predicted. Technical assistance for predicting the fate of the spill may be necessary. Assistance may be necessary to model the spill to determine the potential to impact areas. Additional information is provided by over flights, site surveys, and spill impact and risk assessments from the Operations and Planning Sections. The local Italian authorities may also be helpful in determining the wildlife areas at risk.

3.11.2.2 Response Resource Availability

Once the response actions are prioritized and alternative response methods have been considered, the availability of response resources to implement response actions needs to be established, for both short and long-term use. These resources include both equipment and manpower required for implementation of the Incident Action Plan. The Operations Section Chief assists the Planning Section Chief in updating the availability of response resources for recovery and cleanup of the spill and the level of response resources needed based on operations in the emergency phase.

Additional manpower may also be necessary to implement response actions. The Logistics, Operations, and Planning Section chiefs should be consulted to determine the manpower needed to meet each section's operational goals throughout the spill event.

3.11.2.3 Reports and Status Updates

Once the Initial Action Plan is complete and implemented, the Planning Section must document all response activities. This task is essential in keeping the command up to date on the use of resources,

response accomplishments, and activities of personnel. The Planning Section Chief supervises the documentation efforts and is assisted by the Documentation Unit Leader.

The section chiefs and the command staff generally require daily situation status reports. These reports vary depending on the responsibilities of the party receiving the report. The status reports are coordinated by the Situation Unit Leader and should include the status of the following:

- Spilled materials
- Equipment resources currently assigned, available, or out-of-service
- Personnel resources
- Sensitive area impacts
- Shoreline impacts
- Wildlife impacts
- Waste management operations.

This information should also be posted in the Command Center for reference throughout the spill event and should include maps showing the location of the spill, spill trajectories, response operations, and staging areas.

3.11.2.4 Environmental Issues

Another responsibility of the Planning Section is to ensure that systems are in place during operations to collect, evaluate, analyze, and disseminate information on environmental, cultural, and social aspects of the spill event. The Planning Section is assisted mainly by the Operations in obtaining information in these areas.

3.11.2.5 Sampling and Monitoring

A sampling and monitoring program should be established during response operations to obtain data for determining the spill's overall impact on the environment and to determine shoreline measures for response and cleanup options. This program can also provide input for real time modeling of the spill. Results from the sampling and monitoring program are also used by the Operations and Planning Sections to determine if various response operations are effective.

The type of program established depends on its objective, which may range from determining the effectiveness of a bioremediation product on the spill to determining if shoreline contamination is a result of the spilled oil. For the environmentally sensitive areas within the impact zone, the monitoring program should have a specific objective, an adequate sampling method for gathering data (e.g., control groups,

significant number of random samples, specific habitats, specific rate of sampling), and a definitive method for comparing results.

3.11.2.6 Wildlife Considerations

The Environmental Unit Leader is responsible for providing updates on the impact of the spill on wildlife. Status on the number of species captured, cleaned, released, or found dead should be recorded and reported to the Operations and Planning Section Chiefs.

3.11.2.7 Formal Approvals or Permits

When responding to a spill, many response activities may require Italian authorities' authorization or permits. These operations may include the following: road access, air logistic support, beach cleaning, boom deployment, buoy mooring, dispersant use, fish harvesting, hazardous material transport, in-situ burning, mobile camp establishment, oil skimming operations, oily waste disposal/incineration, and performance of scientific studies. All required permits would be coordinated with the appropriate Italian authorities' military liaison.

3.11.2.8 Health and Safety Issues

During all response operations, a safe working environment must be provided for all response personnel. Safety concerns can range from physical hazards (slips, trips, and falls) to risks from exposure to hazardous materials. A site-safety plan must be developed for all response operations.

The Safety Officer is responsible for ensuring that a Site-Safety Plan is developed and implemented (see Appendix J). The Operations and Planning Section Chiefs are the liaison for the Safety Officer, reporting on all site safety incidents and actions taken by the Operations and Planning Sections.

The Planning Section documents all updates and changes to the Site-Safety Plan. The Environmental Unit Leader informs the Operations and Planning Section Chiefs of any permits needed with regard to worker health and safety and ensures that all workers are HAZWOPER (or other appropriate training) certified. The Planning Section should obtain copies of HAZWOPER (or other appropriate training) certification for filing purposes.

3.11.2.9 Site Characterization

An initial site characterization of the spill area and region should be performed to determine its possible effects on worker health and safety. These characterizations should relate to specific operations and should include the following information:

- Description and location of general response activity
- Operational goals (as listed in Incident Action Plan)
- Location of specific activities within spill zone
- Maps and sketches of specific sites
- Description of terrain and/or working conditions of site
- Associated site hazards
- Local weather conditions.

The Environmental Unit Leader coordinates efforts with Operations and Logistics section chiefs to obtain this information.

3.11.2.10 Sampling & Monitoring

A monitoring program should be conducted as directed by the Safety Officer. This program monitors exposure levels of chemicals and vapors during response operations. Components of the monitoring program are presented in Appendix J.

3.11.2.11 Site-Safety Planning

As operations change to meet response needs, updates may be required to the Site-Safety Plan. For example, if the spill has impacted the shoreline, or a spill has migrated through the storm water system, an additional site might be added to the plan, requiring site characterization and additional monitoring. As the Incident Action Plan changes to meet operational goals, corresponding updates on safety or health issues is essential. A generic Site Safety Plan is provided in Appendix J.

3.11.2.12 Waste Management and Disposal

The Planning Section is also responsible for reporting to Section Chiefs and the Command Staff on the status of waste management operations. The IAP should address response actions that would eliminate or reduce the amount of waste generated. The Hazardous Waste Management Specialist and the Environmental Unit Leader work together to develop an effective waste management plan, coordinate with the Operations Section Disposal Group, and ensure all necessary clearances or permits are obtained for storing and removing wastes generated during operations

Various categories of waste may be generated at various phases of response operations, including:

- Solid wastes (e.g., oily sorbents, shore debris)
- Liquid wastes (e.g., recovered product, oil/water mixtures, oily sludge)
- Refuse
- Sewage
- Hazardous waste

3.11.2.13 Temporary Storage

Prior to disposal, most of the wastes generated during response operations have to be temporarily stored. In case of a significant oil spill in the water, a large quantity of oily waste (OW) may be generated. With no designated NSA OW storage capacity, early determination of temporary storage requirements and support providers is essential to effective operations. Mechanical removal equipment (Vacuum Trucks, Skimmers) will fill quickly and will need to be off-loaded in a timely manner to ensure continuity of recovery actions. Operators should be prompted to make their Recovery and Protection Branch Director aware of their progress in filling the available containment, so that advance arrangements can be made for offload.

When determining where wastes should be stored, efforts should be made to reduce the amount of waste that could be classified as hazardous waste. This can be achieved by separating liquid and solid wastes at all phases of response operations, including at sea, on board recovery vessels, and on shore.

3.11.2.14 Disposal Plan

The Planning Section (Hazardous Waste Management Specialist) should develop the Disposal Plan with assistance from the Operations and the Logistics Sections. This plan should include several different phases of the waste process such as collection, storage, and treatment of spill-generated waste prior to transport and disposal.

This plan should include information on a survey of wastes (obtain from Hazardous Waste Management Specialist), disposal alternatives for hazardous and non-hazardous wastes, and permit requirements for these alternatives. The field survey of the wastes generated should determine the origin of the waste, the type of waste, the location of the waste, its volume or weight, method of containment, and means of transferring the waste. Most wastes generated are handled by the Defense Reutilization Marketing Office (DRMO).

3.12 Logistics Section

3.12.1 Food Services

It is incumbent upon the NSA Naples Logistics Section Chief to develop food service management procedures that facilitate the well-balanced care and feeding of all personnel associated with the response organization. While contractors are normally responsible for feeding their own personnel, the remote location of some OHS spill incidents may require a single coordinated food service effort organized by the Facility Incident Commander or NOSC.

At a minimum, the Logistics Section Chief determines the method of feeding to best fit each probable OHS response incident. The Logistics Section Chief works with assigned Facility Incident Commander to identify requirements for food supplies, portable cooking facilities and food preparation workstations, and to identify all potable water requirements. The Logistics Section Chief must be able to anticipate the number of personnel to be fed as well as any special feeding requirements due to the kind/location of the OHS response incident.

The Logistics Section Chief develops a feeding plan that identifies the different levels of response needed to cope with the magnitude and location of potential incidents. The Logistics Section Chief must interact closely with the Operations and Planning Sections to determine personnel requirements. Specific feeding plans will address:

- Dining facilities versus "work site" consumption
- Food distribution plan, including offshore
- Potable water dispensing plan, including offshore
- Food preparation sanitation
- Recommended menus for balanced nutrition
- Hours of operation
- Garbage disposal
- Demobilization requirements.

3.12.2 Equipment and Materials

3.12.2.1 Staging Area

The staging area is a location where equipment and personnel from all response organizations are assembled, maintained, and deployed to the OHS response site. A sound staging area infrastructure expands operational opportunities and maximizes the potential for overall success. With the stringent

security measures in place at both NSA and the Gaeta Complex, it's essential to have accessible staging areas. For any staging area, the following characteristics are required:

- An accurate shipping address and local point of contact. In some cases, the optimal staging area may only be referenced as a local landmark.
- A smooth surface area large enough for the storage of all equipment and for safe maneuvering of the material handling equipment.
- A location relatively close to the pollution site to minimize transit time for equipment and personnel. The type of OHS incident will sometimes influence the proximity of the staging area. Strong prevailing winds should be considered in the selection process.
- Ready access to piers capable of accommodating the support vessels (for waterborne pollution incidents). The safe loading capacity of the pier may come into play, if portable crane services are anticipated.
- Material handling equipment (MHE) for unloading supply trucks or vessels on short notice.
- Security against theft and vandalism. Security measures may include fencing, portable lighting, and temporary guard services.
- Sanitary and other personnel support facilities.
- Communication links or the capability to establish such links rapidly. Nearby phone lines should also be available to accommodate the potential need for long-term hard-wired communications. New integrated communications system should alleviate the challenge of multiple networks.

3.12.2.2 Stores and Supplies

The Logistics Section Chief also must develop general supply management procedures that will enhance operational flexibility and ensure that all personnel associated with the response organization have the proper tools and equipment necessary to perform their duties. While contractors are normally responsible for their own personnel and general supplies, the remote location of some OHS response incidents may require a single coordinated general supply effort organized by NSA Naples.

The Logistics Section Chief determines the method of providing supply support to best fit each probable OHS response incident. The Logistics Section Chief works with assigned Facility Incident Commander s to identify the requirements and potential sources with which to meet requirements for administrative supplies, portable equipment, repair parts, fuel, consumables, etc. The Logistics Section Chief must be able to anticipate the number of personnel to operate temporary issue and storage facilities as well as any special equipment requirements due to the type and location of the OHS incident.

The Logistics Section Chief develops a support plan that identifies the different levels of response needed to cope with the magnitude and location of potential incidents. The Logistics Section Chief must interact

closely with the Operations and Planning Sections to determine forecasted consumable requirements. Specific supply support plans will address:

- Fuel procurement
- Consumables procurement
- Food procurement
- Potable water procurement
- Equipment rentals
- Receiving operations
- Temporary storage operations
- Issuing operations
- Demobilization requirements

3.12.2.3 Medical

Medical support will be initially managed by the Medical Officer assigned to the Command Staff, and utilize the Hospital's SOPs for casualty assistance and personnel monitoring.

In the event of a large-scale OHS incident, however, the Logistics Section Chief also plans for providing emergency medical care for all personnel associated with the OHS response organization.

The level of emergency medical assistance that is required to support a response effort is difficult to predict and may vary considerably between pollution incidents. Due to the reactivity, volatility, and unpredictable nature of many OHS response incidents, response personnel, even when properly trained and equipped, may require first aid. In a worst case scenario, fire, explosion, and/or the release of a toxic gas could cause initial widespread injury as well as threaten many other personnel located beyond the immediate vicinity of the release.

For high risk or remotely located responses, arrangements must be made to evacuate injured personnel rapidly, in which case a Medical Unit Leader may be assigned to identify the various means of evacuation (e.g., ambulance, helicopter, small craft) as well as the civilian and military medical facilities that can provide the emergency medical services. Should an OHS response incident require that response personnel be evacuated, the evacuation plan and procedures set forth in the NSA Naples Emergency Management Plan shall be followed.

The Medical Unit Leader (if assigned) is also responsible for ensuring that all press release information concerning personnel injuries or potential danger to the local communities is properly disseminated through Public Affairs.

3.12.2.4 Communications

For a large, extended response, the Service Branch Supervisor must develop communication management procedures that facilitate rapid exchange of information throughout all parts of the response organization. To assist, the Logistics Section Chief may assume the responsibilities of the Communications Unit Leader or assign one.

It is not necessary that all communications equipment be on hand or stored solely for dedicated use during major incidents. However, sufficient types and quantities of communications equipment should be available for immediate use during the emergency phase of an incident on a 24-hour/day basis. At a minimum, the Communications Unit Leader works with the Facility Incident Commander to identify and procure the following communication equipment:

- Hand-held Radios -- Sufficient number to outfit key members of the response team expected to be utilized during a worst-case scenario incident plus an additional 10% held in reserve to accommodate breakdowns. Extra batteries and chargers should also be identified.

- Cellular Phones -- Sufficient number to outfit key members of the response team expected to be utilized during a worst-case scenario incident plus an additional 10% held in reserve to accommodate breakdowns. Extra batteries and chargers should also be identified.

- Pagers -- Sufficient number to outfit key members of the response team expected to be utilized during a worst case scenario incident plus an additional 10% held in reserve to accommodate breakdowns. Extra batteries should also be identified.

- Fax Machines -- Sufficient number to outfit the command center, forward command posts, and the staging areas.

Demobilization turn-in procedures should also be developed to facilitate the systematic return and stowage of all communications equipment through a custody transfer documentation process.

Additionally, the Communications Unit Leader will develop a system of information display boards that will clearly indicate key telephone numbers and radio frequencies. These boards should be developed in advance to reduce effort otherwise required by command center personnel during the emergency phase of

an incident when time and personnel are in short supply. Keeping an up-to-date master display of telephone, pager, and fax numbers is an important task at the command center, and care must be exercised to maintain the security of many of these numbers.

Communications planning should also include consideration and preparation for establishing hard-wired telephone/fax lines during those OHS response incidents requiring the extended support of a long-term unified command center. For offshore ship-related incidents, satellite communication systems such as the Maritime Communication System are invaluable for sending voice, data, or telex messages. SUPSALV can provide information and guidance on utilizing this equipment.

3.13 Finance/Admin Section

3.13.1 Funding

3.13.1.1 Pollution Response

In those situations where the NOSC or Facility Incident Commander must initiate response actions without advance funds from the spiller, the cost verification procedures described in Section 3.14 are critical.

3.13.1.2 Initial Emergency

When a pollution incident occurs, the responsible party must identify and allocate funds for cleanup expenses quickly. When appropriate, initial funding can be provided by a responding local Navy shore activity for later reimbursement. If funds greater than those initially available from the spiller or local shore activity are required, the major claimant should be requested to provide additional funds. An estimate of funds required, and a schedule of when those funds must be available, should be developed by the Spill Management Team, particularly Operations, as soon as possible during the early phases of the response.

3.13.1.3 Limitations

The amount of funding immediately available should not limit the extent of the initial response effort. When necessary, contracts for outside sources may be written with limited periods of performance and cost ceilings to the extent of available funds. Follow-on negotiations and contract modifications can be

implemented as additional funds are received. The availability of follow-on funding should be directly related to the severity of the oil pollution incident.

3.13.2 Estimating Cleanup Costs

During the initial pollution assessment, the Facility Incident Commander of the Spill Management Team should evaluate the magnitude of the incident and estimate cleanup costs. Exact cost estimating is not necessary. However, failure to properly estimate costs could delay final funding of the cleanup effort as repetitive funding transactions are briefed and executed through the spiller's chain of command. Assistance in estimating cleanup costs for large or complex operations can be obtained from SUPSALV or NAVFAC.

3.13.3 Contracting

3.13.3.1 Authority

Large pollution cleanups may require contracting authority beyond the authorized limits of the responsible party or local Navy responder. Significant contracting actions for emergency services shall be coordinated through the NSA Spill Management Team, the Facility Incident Commander, and the appropriate contract specialist. The level of authority and contracting expertise necessary to assist the NSA Spill Management Team can be acquired through NRCC, Naples. The Facility Incident Commander staff shall involve the NRCC contracting personnel in training exercises to ensure that the contract specialist has a clear understanding of the spill response process. Follow-on construction contracts for restoration and similar work will normally be handled through the Naval Facilities Engineering Command.

SUPSALV maintains contracts for worldwide emergency salvage and pollution response. These contracts can be used by the Facility Incident Commander, through the NOSC, or the responding activity to obtain equipment or services needed for a Navy OHS spill if funding is channeled through SUPSALV. Note, however, that NAVSEA fiscal and accounting procedures prohibit SUPSALV from mobilizing either equipment or the SUPSALV contractor without an initial line of accounting data. SUPSALV is mission-funded to respond for a minimal assessment response to fleet units and shore activities when they call for assistance. However, SUPSALV is not funded to actually perform cleanup operations.

3.13.3.2 Staff Support

The NSA Business and Finance Director must ensure that support personnel are available to provide accounting information, cost estimates, purchasing authority, vendor interface, and verification of expenditures throughout the response. Additional contracting support personnel may be required for complex operations since all reimbursable expenditures must be approved and a daily summary of costs must be maintained throughout the cleanup effort.

3.14 Funding of OHS Spill Response and Reimbursement of Funds

3.14.1 Funding Responsibilities

The responsibility for funding and/or reimbursing the costs of OHS spill response efforts rests with the responsible party. **Navy vessels, aircraft, shore facilities, units, or commands that have OHS spill events shall be responsible for payment and/or the securing of funding, through their immediate chain of command, for OHS spill response and removal costs.** The NOSC, or responding activity, shall seek a formal line of accounting data, funding citation, or reimbursement from the responsible party or immediate chain of command as soon as possible. However, lack of an immediate funding transfer from the responsible party or his immediate chain of command to the responder must not delay unified Navy action.

3.14.2 Navy Reimbursement

The following are examples of reimbursable costs attendant to Navy OHS spill response actions:

- Travel and *per diem* costs of personnel who were requested to directly support the response effort;
- Local or state government costs in direct support of the response effort;
- Requested and approved overtime for Navy civilian personnel;
- Fuel expended by Navy or government vessels, vehicles, and aircraft which were requested by the Facility Incident Commander to support the response;
- Supplies, materials, or minor equipment procured specifically for the response;
- Rental or lease of equipment obtained specifically for the response;
- Transportation of equipment not otherwise funded;
- Cost of civilian cleanup or disposal companies who were directly contracted by the Facility Incident Commander;
- Contracted scientific/technical support;
- Repair, maintenance, and refurbishment of equipment used in the response;

- Return transport of equipment not otherwise funded;
- Final disposal of recovered oil, HS, and debris.

3.14.3 DLA/DESC Reimbursement Procedures

The recovery of Navy costs in support of pollution incidents associated with "capitalized" Defense Logistics Agency (DLA)/Defense Energy Supply Center (DESC) petroleum products is described in the DoD instruction 4140.25M, DoD Management of Bulk Petroleum Products. DESC will only fund the response/cleanup efforts associated with DLA/DESC-owned petroleum products if the spill did not result from gross operator negligence. After DLA/DESC products have been delivered to the end-user (e.g., aircraft, ship, heating tank, etc.) they are no longer the responsibility of DESC.

3.14.4 Funding Documentation

All requests for equipment or services must be documented. A verbal request must be confirmed by an appropriate funding document or other acceptable record containing the full line of accounting data with cost ceilings from the spiller, or major claimant.

3.14.5 Cost Verification

When services or equipment are contracted, the NOSC is responsible for verifying that the contractor performs as required by contract, and that costs submitted for payment are factual. The assignment of additional on-site personnel may be required for proper cost verification. On-scene personnel must ensure adequate commercial contracts issued for pollution cleanup contains provisions for daily cost summaries and specifies the method for verification of performance.

3.15 Incident Command Management

3.15.1 Command Post (CP)

For Spill Management Team operations, NSA Naples will utilize a series of Command Posts, dependent on incident specifics. As a response grows, additional space and dedicated phone lines may be required for major pollution responses. As cited in the Incident Management Handbook, NSA Naples Command Post policy is:

- **NSA Land OHS spill incident**- FD is ON-SCENE INCIDENT COMMANDER:
    - COMMAND POST: Fire Station or Command vehicle
    - EOC if activated
- **Off-base-** FD is ON-SCENE INCIDENT COMMANDER
    - COMMAND POST: Fire Station or Command vehicle
    - EOC if activated
- **Oil spill - Gaeta Per Complex**: Installation Commander is ON-SCENE INCIDENT COMMANDER
    - COMMAND POST: Port Operations Office

Ensure all personnel contacted to respond are informed of the COMMAND POST location!!

3.16 Incident Information Management

Central to the effectiveness of NSA Naples in dealing with a major OHS response incident is a sound communication infrastructure. Fully integrated communications allow command center personnel to communicate directly with responsible parties, contractors, support agencies, response vessels, and field personnel for purposes of command and control, process tracking, and exchange of critical information, such as the location and status of response assets. Additionally, an accurate, comprehensive Situation Display is crucial to an effective Spill Management Team operation. Figure 3-10 shows a recommended display, as transitioned from the original ICS 201 Incident Briefing.

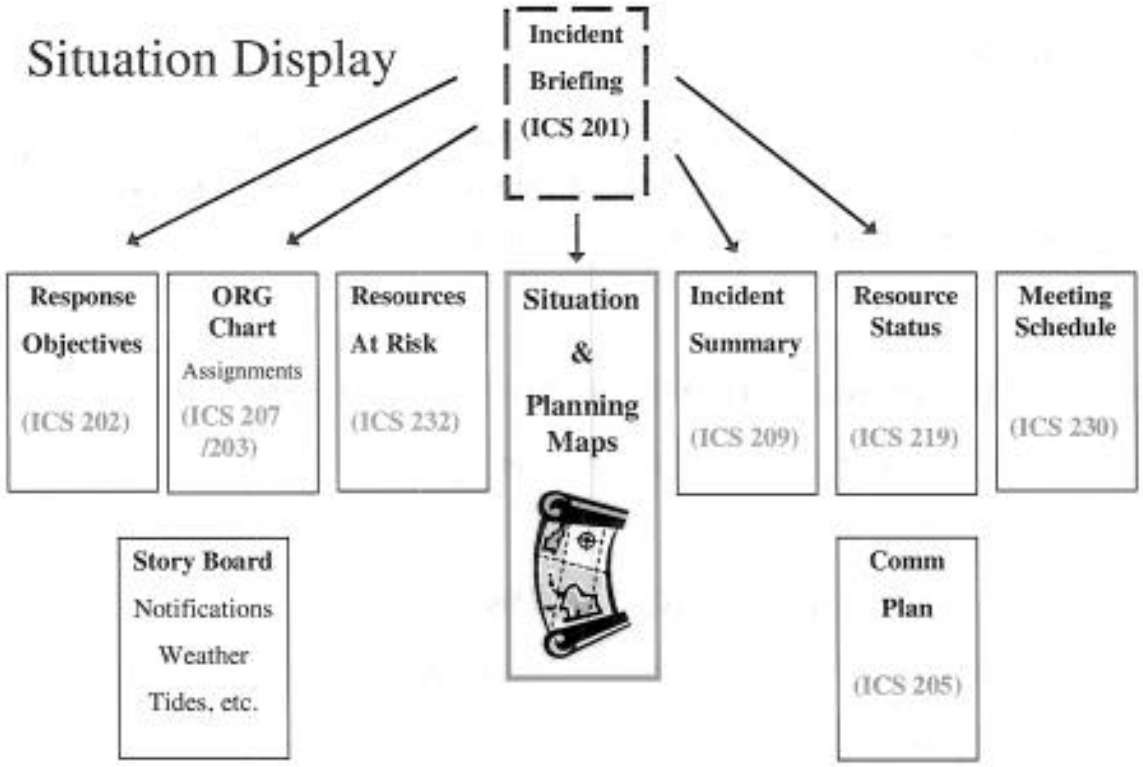


Figure 3-10 Typical Situation Display

3.16.1 ICS Staffing Requirements

The number of personnel required in Operations, Planning, Logistics or Finance/Admin varies with the magnitude and circumstances surrounding the source and cause of the event. Personnel assigned as Section Chiefs will be familiar with the possible tasks that their sections might be required to perform, and ensure sufficient trained personnel are assigned and available. Additionally, they will ensure that effective command and control is maintained as the organization expands.

3.16.2 Response Team Support

Other Navy Commands and agencies may be able to provide additional support to the NSA Naples Spill Management Team. A listing is contained in the Incident Management Handbook (Volume I) Section 6.

3.17 Response Actions

As discussed above, OHS incident response management requirements, strategies, and procedures are detailed in the Incident Management Handbook (Volume I) Sections 1 and 3. Spill Management Team operations expand the management capability (reinforced), but will primarily utilize the operational response elements as contained in the Incident Management Handbook.

This includes:

- NSA initial response actions are detailed in the Incident Management Handbook Sections 1and 5;
- Response/sensitive area protection strategies detailed in Incident Management Handbook, Appendices A and B;
- Gaeta Complex on-water response procedures and strategies are detailed in the Incident Management Handbook, Annex A.

3.18 Response Equipment

Installation resource inventory for Gaeta can be found in found in the IMH, Annex A (Gaeta).
Installation response resource inventories are kept and updated by each of the following departments: EMD, Fire and Emergency Services, PW (Environmental Division).

3.19 Response Overview

Although primary OHS response guidance is contained in the IMH, the following summary is provided for information in support of Spill Management Team operations.

3.20 Potential Impacts

Overall, the resources most likely to be impacted from a discharge within the NSA Naples AOR are land areas and storm sewers for land-based spills, and coastal waters in the vicinity of the Gaeta Complex for vessel fuel spill incidents. Based on the risk, primary sensitive area protection objectives are to limit the spread of POLs and minimize potential impacts to ground and coastal areas. Table 3-1 summarizes the NSA Naples priority protection strategies.

Table 3-1 Gaeta Sensitive Area Sites

Site Number (Priority)	Name	Description/Location
A-1 (1)	**Aquaculture Facility**	Exclusion, and/or deflection configurations to keep oil from impacting this facility. The facility is offshore and will require 360 degree exclusion booming to keep oil from impacting the resource.
A-2 (2)	**Recreational Beach**	Shoreline protection, exclusion, and/or deflection configurations to keep oil from impacting swimming beach.
A-3 (3)	**Private Marinas**	Exclusion boom to prohibit oil from impacting the vessels present.
B-1 (4)	**Gaeta Harbor shoreline**	Exclusion boom for protecting public swimming beaches, riprap shorelines. Diversion boom bringing oil into beach of opportunity for maximum recovery.
B-2 (5)	**Oasi Blu di Monte Orlando**	This Public Maritime Domain is registered, but its boundaries are not clear, nor is its Management Category (level of protection). If oil is expected to reach this general area, local environmental authorities should be notified for guidance.
B-3 (5)	**Oasi Blu di Gianola**	This Public Maritime Domain is registered, but its boundaries are not clear, nor is its Management Category (level of protection). If oil is expected to reach this general area, local environmental authorities should be notified for guidance.

3.21 Land Response

3.21.1 OHS/DW Facilities

Detailed OHS/DW spill responses support information, site-specific maps and photos for OHS/DW facilities are found in Appendix C and H.

There are 15 significant OHS/DW storage and handling facilities. A wide variety of OHS/DW is stored in open areas, in storage lockers and buildings, which for the most part are designed for the safe and contained storage of OHS/DW. The most likely spill would occur during the handling of large palletized containers, i.e. 55 gallons drums by forklift or during the transfer of liquids or dry material for consolidation. The largest spill would be 55 gallons, which would under most situations be spilled on the pavement and could be cleaned up with spill kit material on hand. For those facilities that have floor drains, drainage culverts or ditches spilled material may have to be recovered at the drainage outfall.

3.21.2 POL Facilities

There are two categories of land POL spills that are most likely to occur:

1. Overfills at USTs, ASTs and diesel fuel truck.
2. Accident involving a diesel fuel truck in transit.

The specific response action will depend on the quantity of fuel spilled and where it occurs. For large quantity spills on the ground containment of free product can be achieved through the use of physical barriers, such as sorbent booms or earth berms. For a summary of standard land based spill response strategies for non-bulk POL facilities, refer to Table 3-2.

These facilities consist of underground storage tanks (USTs) and aboveground storage tanks (ASTs) that are either double walled or single walled ASTs with open containment structures or without containment. The most likely spill incident would occur due to overfill during filling operations. It is estimated that the flow rate for such an event is 75 GPM and a total of 150 gallons would be released until the fuel truck

driver shuts off the flow. All single walled ASTs without containment are at greater risk of a release to the environment due to a tank failure. Spill predictions and response strategies are also discussed in Appendix G.

Table 3-2 Standard Response to Spills From Non-Bulk POL Facilities

SOURCE	WORST CASE DISCHARGE QUANTITY	CONTAINMENT	DRAINAGE	RECOVERY
AST overfill without containment AST Double walled overfill	150 Gallons	None	To ground or storm drain.	Remove contaminated soil. Intercept at outfall or OWS
AST tank failure without containment	Total tank contents	None	To ground or storm drain.	Remove contaminated soil. Intercept at outfall or OWS
UST overfill	150 Gallons	None	To ground or storm drain.	Remove contaminated soil. Intercept at outfall or OWS
AST overfill with containment	150 Gallons	Open containment structure	In containment	Remove free product from containment
Diesel Fuel truck overfill without containment	150 Gallons	None	To storm drain	Intercept at outfall

3.22 On-Water Response

POL transfer operations in the Gaeta Complex Area pose the greatest risk for a fuel spill on water due to the risk elements involved, including handling and quantity of fuel transferred to/from ships or internally. The Installation Commander (or designated representative) is the designated On-Scene Incident Commander and the on water spill Facility Response Team, Water is manned by the Port Operations personnel and others as detailed in the Incident Management Handbook (Volume I) Section 3. ANNEX A of Volume 1 provides the general site information and protection strategies.

4.0 REPORTING

4.1 Authority & Responsibility

All oil and hazardous substance pollution incidents on or attendant to operations from NSA Naples will be reported!

Primary reference directives are:

- OPNAVINST 5090.1C, Change 4
- C6FINST 5090.2/CNREINST 5090.2 (series)
- Final Governing Standards for Italy (2002)

4.2 Spill Reporting Procedures

4.2.1 Spill Notification

There are three levels of oil and hazardous substance spill reporting:

1. Internal voice reports
2. External voice reports
3. Naval message reports

4.2.2 Reportable Quantities (RQ)

Reporting of oil and hazardous substance spill incidents will be in accordance with the procedures detailed in the IMH (Volume I).

- The *FGS* requirements for spill reporting are provided below for information and to facilitate compliance with all appropriate reporting requirements.
- A spill is considered "significant" and a "reportable quantity (RQ)" if it meets the following criteria (Table 4-1), and must be reported as detailed in Table 4-2.

Table 4-1 "Significant" Spill Thresholds	
Substance	Is a **Significant (RQ)** spill if:
OIL - Same Water and Land	> ***110 gallons*** (400 liters)
HS - Same Water and Land	Quantity that meets or exceeds the criteria listed in *FGS* Appendix A, (SPRP Volume II, Appendix A), and as below:
Others	
Refined **POL** or ***liquid*** or ***semi-liquid*** HM, HW, or HS:	> ***110 gallons*** (400 liters)
Other **solid HM**:	> ***500 pounds*** (225 Kg)
Combination of POL and HM, HW, or HS	> ***750 pounds*** (340 Kg)
All OIL AND HAZADOUS SUBSTANCES	o A water resource has been polluted. The FIC has determined that the spill is significant.

4.2.3 Reporting

When an oil and hazardous substance spill incident meets the external notification thresholds (Table 4-1), reporting will be conducted as follows

!NOTE!

The Commander US Naval Forces Europe (COMNAVEUR) Command Center and Navy Europe Plans and Maritime Integrated Operations Center (MIOC) serves as a single point of contact for notifying C6F and the Commander, Navy Region Europe (CNRE) of spill incidents. The MIOC staff will ensure the appropriate Navy On-Scene Coordinator (NOSC) is notified. Preferred notification method is by phone as reflected in Table 4-2.

Table 4-2 External OHS Spill Reporting

Incident	Report immediately (Voice) to:	Follow-on written reports:
1. Significant (RQ) OHS spill	1. **MIOC** • **C6F-CNRE (NOSC)** DSN: 626-4551/2 Comm.: 39-081-568-4551/2	OPNAV 5090 Message Report IAW Vol. I, Section 6 (Include CNE/C6F)
2. Significant OHS spill; threatens Italian drinking water resource; can't be contained on base; and/or FIC determines.	1. **MIOC** • **C-6F-CNRE (NOSC)** DSN: 626-4551/2 Comm.: 39-081-568-4551/2	OPNAV 5090 Message Report IAW Vol. I, Section 6 (Include CNE/C6F)

Incident	Report immediately (Voice) to:	Follow-on written reports:
and	**2. Italian Authorities:** **A. NSA/Off-base**: Commander, Italian Air Force Base **B. Gaeta Pier Complex:** Commander, Italian Naval Base	
and	**3. OPREP reporting as appropriate**; IAW Command Duty officer (CDO) guidance and CO release.	**OPREP reporting, as appropriate. Message to follow initial OPREP voice report IAW CDO guidance.
3. DOD Executive Agent Notification	MIOC will contact the DoD Executive Agent, CNE/C6F.	Ensure CNE/C6F on all follow-on message traffic.

4.2.4 Liaison

In accordance with the FGS requirements, NSA Naples will notify the Italian Base Commander through the CO, Executive Officer (XO), or Executive Assistant of any incident requiring host nation notification; or as a courtesy "heads-up" for any situation that has the potential to become significant.

4.2.5 Executive Agent Notification.

When an oil and hazardous substance incident meets threshold levels for notification of the DoD Executive Agent, as listed in Table 4-2, contacting the MIOC will satisfy that requirement.

4.2.6 Reports and Messages

As required by OPNAVINST 5090.1C and C6FINST 5090.2/CNREINST 5090.2 the NOSC must be notified by message when a significant spill occurs within the FIC's Area of Responsibility (AOR). Specific reporting requirements and sample message formats are found in the IMH (Volume I) Sections 1 and 6. All significant spills will immediately be reported by voice communication, followed by a confirming notification in accordance with the notification requirements and report forms provided in the IMH, Section 6.

The CDO and Environmental will be responsible for determining appropriate external reporting; and draft requisite message traffic in accordance with the formats contained in the IMH, Section 6.

For spills at the Gaeta Pier:

- If a United States Navy/ Military Sealift Command (USN/MSC) vessel is the responsible party, they should send the OPNAV 5090/2 Oil Spill Report (Section 6).
- If source is unknown, or USN/MSC RP unable/ unwilling to send the message, coordinate details with Command Duty Officer (CDO)/PW-Environmental to send message from NSA Naples as required in references A and B.
- If spill is non-US, do not send OPNAV 5090 Oil Spill Report; send Unit SITREP as appropriate.

Operational Reporting (OPREP). Oil and hazardous substance pollution incidents will be reported via the OPREP system in accordance with the Chief of Naval Operations (CNO) guidance whenever the CO, NSA Naples determines that conditions meet the criteria. The CDO will act as the command POC for OPREP reporting and will draft, in coordination with Environmental, all required message traffic.

4.3 Post Discharge Internal Reporting

Any activity responsible for a reportable oil and hazardous substance spill will follow-up with a report to Environmental detailing the cause, impacts, lessons-learned, and preventive measures taken to preclude a recurrence. Environmental will forward copies to the CO/XO, Public Works Officer (PWO), and impacted parties.

5.0 TRAINING

5.1 General requirements

A comprehensive, coordinated training program is essential to providing the foundation and long term continuity required for an effective oil and hazardous substance contingency planning and response program. Oil and hazardous substance contingency planning and response program elements are complex, and require full coverage of regulatory, operational, and scientific subjects and skills. The diverse elements must be integrated into a focused planning and response effort that fully supports the protection of human health and safety, protection of the environment, operational mission requirements and host nation compliance requirements.

5.2 Training, Drills, & Exercises

The following describes the NSA Naples oil and hazardous substance training and drill/exercise program. This annex identifies training requirements and assigns responsibilities for personnel under the authority of the Commanding Officer. This includes training requirements for tenant commands, contractors, and organizations operating under an inter-service support agreement, and visitors who use oil and/or HM or generate HW at the NSA Naples facilities. Training on the implementation of this response plan, including notification procedures and emergency response actions, shall be conducted annually for all personnel with responsibilities under this plan. The NSA Naples Environmental Division and applicable Department Heads shall maintain all training logs, certifications, and schedules for response personnel.

5.2.1 Regulatory Requirements

Although NSA Naples is an oversea installation and comes under the requirements of the FGS for Italy, Navy policy has adopted key U.S. regulations and guidelines as best management practices and, as detailed in OPNAVINST 5090.1C, Chapter 24, as training standards. As such, the standards are the baseline training requirements for Navy installations. The following regulations define training requirements for persons involved in the management, supervision, handling, storage, packaging, transporting, treating, and disposal of oil, hazardous materials, or hazardous wastes, and parts of which are from the nucleus of the Navy training requirements.

- OPNAVINST 5090.1C Environmental and Natural Resources Program Manual
- OPNAVINST 3440.17 Commander Naval Installations (CNI) Emergency Management Directive
- C6FINST 5090.2/CNREINST 5090.2 Regional NOSC Plan
- 29 Code of Federal Regulations (CFR) 1910.120; Occupational Safety and Health (OSHA) Regulations on Hazardous Waste and Emergency Response
- 29 CFR 1920.1200; OSHA Hazard Communication (HAZCOM) Standard
- 40 CFR 260-268; Environmental Protection Agency (EPA) Regulations on Hazardous Waste
- 49 CFR 100-199; Department of Transportation (DOT) Hazardous Material Regulations
- 40 CFR 311; Worker Protection Standards for Hazardous Waste Operations and Emergency Response
- OPNAVINST 4110.2; Hazardous Material Control and Management (HMC&M)
- OPNAVINST 5100.23D; Navy Occupational Safety and Health (NAVOSH) Manual

Note: Underlined are primary reference requirements.

5.2.2 Policy

The NSA Naples policy is to comply with all applicable training regulations pertaining to emergency response and effective safety requirements for oil and hazardous substance storage and handling. Proper training in oil and hazardous substance management is critical to the safety and health of personnel and the community, protection of the environment, and responsible, cost-effective management of resources.

5.3 Personnel Training Requirements

Required oil and hazardous substance training levels and courses are based on assigned responsibilities. Department heads and affected media program managers will ensure that a comprehensive training plan is developed for each individual with the potential for oil and hazardous substance exposure as a result of their duties. Training will generally be covered under 3 categories: General; oil and hazardous substance

Worker; and Response Team member. The level of training for each will be determined within those categories.

5.3.1 General

5.3.1.1 HAZCOM & HAZWOPER

All personnel must receive annual HAZCOM training per 29 CFR 1920.1200 and 29 CFR 1910.120. NSA Naples Environmental provides HAZCOM training to all personnel through Command Indoctrination Training.

5.3.1.2 HW Management

All employees need to be familiar with HW definitions and basic procedures. Even substances commonly used at home, such as cleaners and insect sprays, may be strictly regulated HW when disposed of at NSA. Employees, contractors and visitors need to know how to dispose of these wastes without violating or causing environmental damage.

5.3.2 Oil and Hazardous Substance Worker

Training requirements for personnel assigned to oil and hazardous substance worker positions are in accordance with the NSA Naples HW Management Plan.

5.3.2.1 Emergency Response

All personnel at a HS facility must annually receive awareness training for oil and hazardous substance emergency response. Any employee at a facility using HS may be involved in a HS spill. "Involvement" includes sighting unknown spilled material or calling the Fire Department when a spill occurs. For this reason, all employees are required to be familiar with their facility's basic layout, functions, substances stored/handled, and spill response procedures. Personnel assigned as an actual responder during an Oil and Hazardous Substances spill must receive specialized training.

5.3.2.2 SPR Plan

At a minimum, oil handling personnel should be trained in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and

regulations; general facility operations; and, the contents of the facility SPR Plan. Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management. Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPR Plan for that facility. Such briefings must highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures.

5.3.2.3 STMP

Chapter 16 of OPNAVINST 5090.1C states that all personnel involved in design, construction, installation, management and operation of storage tanks shall receive appropriate storage tank training. The following topics should be covered in the training: corrosion protection measures, compliance records, release detection, reporting investigation and confirmation, corrective action plans, closure, site assessment, Federal, State, and local regulations pertaining to storage tanks, monitoring, removal, repair, retrofit, replacement, remediation, leak detection and product inventory requirements, record keeping, and operation of monitoring systems.

5.3.2.4 FGS Requirements

The FGS for Italy require that specific training be conducted in support of the installation's spill prevention and response program. These topics are incorporated in NSA Naples's comprehensive training program in appropriate classes.

5.3.3 Response Team Members

5.3.3.1 IRO/SMT

For personnel assigned duties and responsibilities to NSA Naples Oil and Hazardous Substances SMT and IROs, minimum training requirements are detailed in Table 5-1.

Table 5-1 IRO/SMT Training Requirements					
Position	**ICS Courses**	**HAZWOPER**	**FRT Course**	**Annual SPRP/TTX**	**Job Specific**
IRO					
FRT Members	100/700	24 Hour	X	FRT leaders	X
First Responders	100/700	24 Hour	If assigned to FRT	Supervisors/Team leaders	X
SMT					
SMT Members	100/200/300/700	Awareness	24 Hour	X	X

5.3.3.2 ICS

Under the requirements of OPNAVINST 3440.17 (CNI EM Instruction) personnel assigned to incident response positions, from first responder to Emergency Operations Center (EOC) Team must complete the appropriate level of Incident Command System (ICS) training. All personnel assigned to a potential response team must complete ICS-100 and 700 courses.

5.3.3.3 SMT & Tabletop Exercise

The training is conducted over two days, tailored to the NSA Naples SPR Plan. The objective of the exercise is to test the SPRP for a significant POL spill. The exercise includes an overview of the SPR Plan and a training session on spill response and the ICS. The tabletop exercise is designed to address Preparedness for Response Exercise Program (PREP) requirements as stipulated in the CNRE NOSC Plan.

5.3.4 Other Training

There is a significant amount of additional training at the Departmental and Divisional level that supports NSA Naples oil and hazardous substance prevention and response goals.

5.3.4.1 Fire Department

The Fire Chief at NSA Naples maintains a periodic training schedule for various personnel rescue and response type training.

5.3.4.2 Fuels Division

Fuels Division conducts periodic oil spill prevention and control training including emergency procedures, source control, and system table-top exercises.

5.3.4.3 Environmental Division

There are a number of Navy-sponsored courses, coordinated by Environmental division, which are conducted on an annual basis. This training crosses category lines and a summary is provided in Table 5-2.

Table 5-2 Annual Environmental Division-Sponsored Training Courses

Course Title
DW Operator Training
HW Facilities Operators Course (HWFOC)
HW Generators
Hazardous Substance Incidence Response Management (HSIRM)
HSIRM Refresher
On-water FRT
Spill Table Top Exercise
ICS for OHS response

5.3.5 Program Management

The following describes the process currently utilized at NSA Naples to develop personalized training plans and to ensure appropriate records are maintained.

1. The Environmental Director and media program managers develop training program(s) required at each relevant function and level in order to meet the training requirements of the FGS.

2. The Environmental Director annually reviews the training program and makes changes as appropriate.

3. The Environmental Director conducts and/or coordinates training in accordance with the training schedule and training programs. All training activities are recorded.

4. Environmental maintains all environmental training records.

Note: Environmental Division promulgates an annual schedule of the above with course convening dates. Course descriptions are found in the NSA Naples Environmental Resource Manual.

5.3.6 Record Keeping

5.3.6.1 Location

Training records are maintained with individual personnel training plans.

5.3.6.2 Individual Schedules

The employee's record must show the dates of initial and refresher training. The record must also show the schedules for all refresher training required and planned for the next five years.

5.3.6.3 Course Content

The employee's record must include written documentation of the subject matter taught for each course and the length of the training. Documentation for formal courses taught by instructors from outside of the organization should include copies of the course synopsis and schedule attached to the training certification. In-house training courses must retain each course's training materials on file for five years.

5.3.6.4 Retention

The HW generator must retain training records of current and former personnel for five years. Training for an employee assigned as a HAZMAT worker must be maintained while assigned and for 90 days thereafter. Training records for oil spill response personnel will also be maintained for a period of three years following completion of the training. These records will be made available upon request of the applicable authority.

5.3.7 Training Courses

Training courses generally correspond to a training level, but in some cases an advanced course will teach several regulatory levels. For example, Emergency Response, Level 5 training of 40 hours may include HAZCOM and HAZMAT specific functions. Supervisors must carefully screen courses to ensure they

satisfy the employee's requirements. The CNRE Environmental Office centrally coordinates environmental training for the European theater. The courses delineated in Table 5-2 reflect the training provide.

Table 5-4 Core Test Components of a Response Plan

Organizational Design	Operational Response	Response Support
1. Notifications	4. Discharge Control	10. Communications
2. Staff Mobilization	5. Assessment of Discharge	11. Transportation
3. Ability to operate within the response management system described in the plan	6. Containment of Discharge	12. Personnel Support
	7. Recovery of Spilled Material(s)	13. Equipment Maintenance & Support
	8. Protection of Resources (Economic, Fish & Wildlife, & Sensitive Environments)	14. Procurement
	9. Disposal of Recovered Material(s)	15. Documentation

5.3.8 Drills & Exercises

IAW Navy policy, NSA Naples conducts facility oil and hazardous substance drills and exercises based the guidelines of the PREP. Annually, there are a series of required response exercises as shown in Table 5-3, with exercise specific exercise guides and log sheets contained in Table 5-7 through 5-14. Also, in accordance with PREP guidelines, all components of the response plan must be exercised every three years to ensure that all components of the plan function adequately for response to an oil or hazardous substance spill. The fifteen core components of a response plan are shown in Table 5-4.

Table 5-3 Annual Oil and Hazardous Substances Response Drill and Exercise Requirements

Drill Type	Annual Periodicity
Equipment Deployment	2
FIC Notification	4
SMT Tabletop Exercise	1
Unannounced-Emergency Procedures	1

Note: Item number corresponds to the PREP numerical designator.

5.3.9 Schedules

An example calendar for documenting the NSA Naples drills is included as 5. NSA Naples will perform the drills in accordance with PREP guidelines to ensure that it accomplishes the triennial cycle of

exercising the entire response plan. The PREP-based Triennial cycle documentation form is also included as an example and planning tool.

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Table 5-5 NSA Naples Drill Schedule (example)

Drill Type	Month											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Equipment Deployment												
Notification												
SMT Tabletop												
Unannounced												

Table 5-6 Triennal Cycle Documentation Form

Triennial CYLCLE Documentation FORM

	Year CY Quarters 1	2	3	4	CY Quarters 5	6	7	8	CY Quarters 9	10	11	12	Core Components: Notification	Staff Mobilization	Operate in RMS	Discharge Contained	Assessment	Containment	Recovery	Protection	Disposal	Communications	Transportation	Personnel Support	Equipment Maint.	Procurement	Documentation
QI Notification																											
Emergency Procedures																											
SMT Tabletop																											
Equipment Deployment																											
OSRO/HSRO Equipment Deployment																											
Gov't-Initiated Unannounced																											
Area Exercise																											

For each quarter in which an exercise was completed, mark that with an "X" then mark each core component tested during an exercise.

5.3.10 Procedures & Logs

Table 5-7 through Table 5-14 describe NSA Naples drill and exercise program procedures and the logs required to record drills and exercises. A record must be maintained for each internal drill and exercise and area exercise.

Table 5-7 FIC and NOSC Notification Drills	
APPLICABILITY	**Facility**
FREQUENCY	Quarterly, or routine communication if it occurs on at least a quarterly basis
INITIATING AUTHORITY	Facility IC
PERSON RESPONSIBLE FOR CONDUCTING THIS DRILL	Facility IC
PARTICIPATING ELEMENTS	Facility response personnel, Facility IC, and NOSC
SCOPE	Exercise communication between the facility personnel and the Facility and Regional Qualified Individuals
OBJECTIVES	Contact must be made with the Facility IC and the NOSC as designated in the response plan
CERTIFICATION	Self-Certification
VERIFICATION	Verification to be accomplished by federal and state regulatory representatives during site visits
RECORD RETENTION	5 years
LOCATION	Records must be kept at the facility
EVALUATION	Self-Evaluation
CREDIT	The plan holder may take credit for this exercise in the course of conducting routine business or other drills, provided that the objectives of the drill are met and the drill is properly recorded. Similarly, credit may be received for an actual spill response when these objectives are met and a proper record generated.

Table 5-8 FIC and NOSC Notification Log		
Topic		**Information**
DATE		
TYPE DRILL/EMERGENCY SCENARIO		
ANNOUNCED OR UNANNOUNCED		
FACILITY QUALIFIED INDIVIDUAL DRILL	CONTACT METHOD	
	TIME OF CONTACT	
	TIME OF CONFIRMATION	
REGIONAL QUALIFIED INDIVIDUAL DRILL	CONTACT METHOD	
	TIME OF CONTACT	
	TIME OF CONFIRMATION	
EVALUATION:		
CHANGES TO BE IMPLEMENTED:		
TIMETABLE FOR IMPLEMENTATION:		
SIGNATURE OF RESPONSIBLE OFFICIAL:		

Table 5-9 SMT Tabletop Exercise	
APPLICABILITY	Facility
FREQUENCY	Annually
INITIATING AUTHORITY	Facility IC
PERSON RESPONSIBLE FOR CONDUCTING THIS DRILL	Facility IC
PARTICIPATING ELEMENTS	Spill Management Team (Initial Response Team, including at a minimum the Facility IC, Deputy Facility IC, Safety and Security)
SCOPE	Exercise the Spill Management Team's organization, communication, and decision-making skills in managing a spill response.
OBJECTIVES	At least one Spill Management Team Tabletop Exercise in a triennial cycle will involve simulation of a worst-case discharge scenario. Exercise the Spill Management Team in a review of: • Knowledge of the response plan • Proper notification • Communications system • Ability to access the Oil Spill Response Organizations (NOSC and any BOA Contractors) • Coordination of organization/agency personnel with responsibility for spill response • Ability to effectively coordinate spill response activity with National Response System infrastructure • Ability to access information in Regional Contingency Plan for location of sensitive areas, resources available within the Region, unique conditions of the Region, etc.
CERTIFICATION	Self-Certification
VERIFICATION	Verification to be accomplished by federal and state regulatory representatives during site visits
RECORD RETENTION	5 years
LOCATION	Records must be kept at the facility.
EVALUATION	Self-Evaluation
CREDIT	The plan holder may take credit for this exercise in the course of conducting routine business or other drills, provided that the objectives of the drill are met and the drill is properly recorded. Similarly, credit may be received for an actual spill response when these objectives are met and a proper record generated.

Table 5-10 SMT Tabletop Drill & Exercise Log	
Topic	**Information**
DATE	
TYPE DRILL/ EMERGENCY SCENARIO	
ANNOUNCED OR UNANNOUNCED	
PERSONNEL INVOLVED (Including Name of Qualified Individual)	
EVALUATION:	
CHANGES TO BE IMPLEMENTED:	
TIMETABLE FOR IMPLEMENTATION:	
SIGNATURE OF RESPONSIBLE INDIVIDUAL:	

Table 5-11 Spill Response Equipment Deployment Drills	
APPLICABILITY	Facility with facility-owned (Navy) response equipment
FREQUENCY	Semiannually
INITIATING AUTHORITY	Facility IC
PERSON RESPONSIBLE FOR CONDUCTING THIS DRILL	Facility IC
PARTICIPATING ELEMENTS	Facility response personnel responsible for logistics and equipment deployment.
SCOPE	Deploy and operate facility-owned response equipment identified in the response plan. Only a representative sample of each type of equipment or that equipment that is necessary to respond to an average most probable discharge, whichever is less, needs to be deployed. The remainder of the equipment which is not deployed must be included in a comprehensive training and maintenance program. Credit will be given for deployment conducted during training. The maintenance program must ensure that the equipment is periodically inspected and maintained in good operating condition in accordance with the manufacturer's recommendations and best commercial practices. All inspection and maintenance must be documented by the owner.
OBJECTIVES	Demonstrate ability of facility personnel to deploy and operate equipment. Ensure response equipment is in proper working order. Dysfunctional response equipment is to be repaired or replaced within 30 days.
CERTIFICATION	Self-Certification
VERIFICATION	Verification to be accomplished by federal and state regulatory representatives during site visits.
RECORD RETENTION	5 years
LOCATION	Records must be kept at the facility.
EVALUATION	Self-Evaluation
CREDIT	The plan holder may take credit for this exercise in the course of conducting routine business or other drills, provided that the objectives of the drill are met, and the drill is properly recorded. Similarly, credit may be received for an actual spill response when these objectives are met and a proper record generated.

Table 5-12 Response Equipment Deployment Drill and Exercise Log	
TOPIC	INFORMATION
DATE	
TYPE DRILL/EMERGENCY SCENARIO	
ANNOUNCED OR UNANNOUNCED	
ON-SITE OR CONTRACTOR	
EQUIPMENT ACTUALLY DEPLOYED	
RESPONSE TIME:	
EVALUATION:	
CHANGES TO BE IMPLEMENTED:	
TIMETABLE FOR IMPLEMENTATION:	
SIGNATURE OF RESPONSIBLE OFFICIAL:	

Table 5-13 Unannounced -Emergency Procedures Drills	
APPLICABILITY:	SPR Plan Holders
FREQUENCY:	Annually
INITIATING AUTHORITY:	Facility IC, NOSC
PERSONS RESPONSIBLE FOR CONDUCTING THIS DRILL:	Facility IC and NOSC
PARTICIPATING ELEMENTS:	Response Plan Holders
SCOPE:	Self-initiated: • May be any required drill except Notification Drill. • Must conduct proper notifications for the scenario. • Must involve equipment once every 3 years
OBJECTIVE:	Conduct proper notifications to respond to the unannounced scenario of an average most probable discharge and demonstrate that equipment deployment is: • Timely • Conducted with adequate amount of equipment for scenario • Properly deployed.
CERTIFICATION:	Initiating Agency (including Facility IC and NOSC)
VERIFICATION:	Initiating Agency (including Facility IC and NOSC)
RECORD RETENTION:	5 years
LOCATION:	Records must be kept at the facility
EVALUATION:	Evaluation to be conducted by initiating agency (including Facility IC and NOSC)
CREDIT:	The plan holder may take credit for this exercise in the course of conducting an actual spill response, provided that the plan is used for response to the spill, the objectives of the drill are met and properly evaluated and documented, and the event is properly recorded.

Table 5-14 Unannounced-Emergency Procedures Drill and Exercise Log	
Topic	**Information**
DATE	
TYPE DRILL/ EMERGENCY SCENARIO	
PERSONNEL INVOLVED (Including Name of Incident Commander)	
OBJECTIVES OF DRILL:	
EVALUATION:	
CHANGES TO BE IMPLEMENTED:	
TIMETABLE FOR IMPLEMENTATION:	
SIGNATURE OF RESPONSIBLE INDIVIDUAL:	

All notes appear at the end of the table.

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Acenaphthene	83329		100
Acenaphthylene	208968		5,000
Acetaldehyde (I)	75070		1,000
Acetaldehyde, chloro-	107200		1,000
Acetaldehyde, trichloro-	75876		5,000
Acetamide	60355		100
Acetamide, N-(aminothioxomethyl)-	591082		1,000
Acetamide, N-(4-ethoxyphenyl)-	62442		100
Acetamide, 2-fluoro-	640197		100
Acetamide, N-9H-fluoren-2-yl-	53963		1
Acetic acid	64197		5,000
Acetic acid (2,4-dichlorophenoxy)-salts and esters	94757		100
Acetic acid, lead(2+) salt	301042		10
Acetic acid, thallium(1+) salt	563688		1000
Acetic acid, (2,4,5-trichlorophenoxy)	93765		1,000
Acetic acid, ethyl ester (I)	141786		5,000
Acetic acid, fluoro-, sodium salt	62748		10
Acetic anhydride	108247		5,000
Acetone (I)	67641		5,000
Acetone cyanohydrin	75865	1,000	10
Acetone thiosemicarbazide	1752303	1,000/10,000	1
Acetonitrile (I,T)	75058		5,000
Acetophenone	98862		5,000
2-Acetylaminofluorene	53963		1
Acetyl bromide	506967		5,000
Acetyl chloride (C,R,T)	75365		5,000
1-Acetyl-2-thiourea	591082		1
Acrolein	107028	500	1
Acrylamide	79061	1,000/10,000	5,000
Acrylic acid (I)	79107		5,000
Acrylonitrile	107131	10,000	100
Acrylyl chloride	814686	100	1
Adipic acid	124049		5,000
Adiponitrile	111693	1,000	1
Aldicarb	116063	100/10,000	1
Aldrin	309002	500/10,000	1
Allyl alcohol	107186	1,000	100
Allylamine	107119	500	1
Allyl chloride	107051		1,000
Aluminum phosphide (R,T)	20859738	500	100
Aluminum sulfate	10043013		5,000
4-Aminobiphenyl	92671		1
5-(Aminomethyl)-3-isoxazolol	2763964		1,000
Aminopterin	54626	500/10,000	1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
4-Aminopyridine	504245		1,000
Amiton	78535	500	1
Amiton oxalate	3734972	100/10,000	1
Amitrole	61825		10
Ammonia	7664417	500	100
Ammonium acetate	631618		5,000
Ammonium benzoate	1863634		5,000
Ammonium bicarbonate	1066337		5,000
Ammonium bichromate	7789095		10
Ammonium bifluoride	1341497		100
Ammonium bisulfite	10192300		5,000
Ammonium carbamate	1111780		5,000
Ammonium carbonate	506876		5,000
Ammonium chloride	12125029		5,000
Ammonium chromate	7788989		10
Ammonium citrate, dibasic	3012655		5,000
Ammonium fluoborate	13826830		5,000
Ammonium fluoride	12125018		100
Ammonium hydroxide	1336216		1,000
Ammonium oxalate	6009707 5972736 14258492		5,000
Ammonium picrate (R)	131748		10
Ammonium silicofluoride	16919190		1,000
Ammonium sulfamate	7773060		5,000
Ammonium sulfide	12135761		100
Ammonium sulfite	10196040		5,000
Ammonium tartrate	14307438 3164292		5,000
Ammonium thiocyanate	1762954		5,000
Ammonium vanadate	7803556		1,000
Amphetamine	300629	1,000	1
Amyl acetate: Iso-Amyl acetate Sec-Amyl acetate Tert-Amyl acetate	628637 123922 626380 625161		5,000
Aniline (I,T)	62533	1,000	5,000
Aniline, 2,4,6- trimethyl	88051	500	1
o-Anisidine	90040		100
Anthracene	120127		5,000
Antimony [4]	7440360		5,000
Antimony pentachloride	7647189		1,000
Antimony pentafluoride	7783702	500	1
Antimony potassium tartrate	28300745		100
Antimony tribromide	7789619		1,000
Antimony trichloride	10025919		1,000
Antimony trifluoride	7783564		1,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Antimony trioxide	1309644		1,000
Antimycin A	1397940	1,000/10,000	1
ANTU (Thiourea 1-Naphthalenyl)	86884	500/10,000	100
Argentate(1-), bis(cyano-C)-, potassium	506616		1
Aroclor 1016	12674112		1
Aroclor 1221	11104282		1
Aroclor 1232	11141165		1
Aroclor 1242	53469219		1
Aroclor 1248	12672296		1
Aroclor 1254	11097691		1
Aroclor 1260	11096825		1
Aroclors	1336363		1
Arsenic [4]	7440382		1
Arsenic acid H_3AsO_4	1327522 7778394		1
Arsenic disulfide	1303328		1
Arsenic oxide As_2O_3	1327533		1
Arsenic oxide As_2O_5	1303282		1
Arsenic pentoxide	1303282	100/10,000	1
Arsenic trichloride	7784341		1
Arsenic trioxide	1327533		1
Arsenic trisulfide	1303339		1
Arsenous oxide	1327533	100/10,000	1
Arsenous trichloride	7784341	500	5,000
Arsine	7784421	100	1
Arsine, diethyl-	692422		1
Arsinic acid, dimethyl-	75605		1
Arsorous dichloride, phenyl-	696286		1
Asbestos [5]	1332214		1
Auramine	492808		100
Azaserine	115026		1
Aziridine	151564		1
Azindine, 2-methyl-	75558		1
Azirino[2',3',3,4]pyrrolo[1,2-a]indole-4, 7-dione,6-amino-8-[[aminocarbonylooxy) methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,[1aS-(1a-alpha, 8-beta, 8a-alpha, 8b-alpha)]-	50077		10
Azinphos-ethyl	2642719	100/10,000	100
Azinphos-methyl	86500	10/10,000	1
Barium cyanide	542621		10
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56495		10
Benz[c]acridine	225514		100
Benzal chloride	98873	500	5,000
Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950585		5,000
Benz[a]anthracene	56553		10

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
1,2-Benzanthracene	56553		10
Benz[a]anthracene, 7,12-dimethyl-	57976		1
Benzenamine (I,T)	62533		5,000
Benzenamine, 3-(Trifluoromethyl)	98168	500	1
Benzenamine, 4,4'-carbonimidoylbis (N,N-dimethyl-	492808		100
Benzenamine, 4-chloro-	106478		1,000
Benzenamine, 4-chloro-2-methyl-, hydrochloride	3165933		100
Benzenamine, N,N-dimethyl-4-(phenylazo-)	60117		10
Benzenamine, 2-methyl-	95534		100
Benzenamine, 4-methyl-	106490		100
Benzenamine, 4,4'-methylenebis(2-chloro-	101144		10
Benzenamine, 2-methyl-, hydrochloride	636215		100
Benzenamine, 2-methyl-5-nitro-	99558		100
Benzenamine, 4-nitro-	100016		5,000
Benzene (I,T)	71432		10
Benzene, 1-(Chloromethyl)-4-Nitro-	100141	500/10,000	1
Benzeneacetic acid, 4-chloro-alpha- (4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510156		10
Benzene, 1-bromo-4-phenoxy-	101553		100
Benzenearsonic Acid	98055	10/10,000	1
Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	305033		10
Benzene, chloro-	108907		100
Benzene, chloromethyl-	100447		100
Benzenediamin, ar-methyl-	25376458 95807 496720 823405		10
1,2-Benzenedicarboxylic acid, dioctyl ester	117840		5,000
1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)]-ester	117817		100
1,2-Benzenedicarboxylic acid, dibutyl ester	84742		10
1,2-Benzenedicarboxylic acid, diethyl ester	84662		1,000
1,2-Benzenedicarboxylic acid, dimethyl ester	131113		5,000
Benzene, 1,2-dichloro-	95501		100
Benzene, 1,3-dichloro-	541731		100
Benzene, 1,4-dichloro-	106467		100
Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	72548		1
Benzene, dichloromethyl-	98873		5,000
Benzene, 1,3-diisocyanotomethyl- (R,T)	584849 91087 264716254		100
Benzene, dimethyl (I,T)	1330207		100
m-Benzene, dimethyl	108383		1,000
o-Benzene, dimethyl	95476		1,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
p-Benzene, dimethyl	106423		100
1,3-Benzenediol	108463		5,000
1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]- (R) -	51434		1,000
Benzeneethanamine, alpha, alpha-dimethyl-	122098		5,000
Benzene, hexachloro-	118741		10
Benzene, hexahydro- (l)	110827		1,000
Benzene, hydroxy-	108952		1,000
Benzene, methyl-	108883		1,000
Benzene, 2-methyl-1,3-dinitro-	606202		100
Benzene, 1-methyl-2,4-dinitro-	121142		10
Benzene, 1-methylethyl- (l)	98828		5,000
Benzene, nitro-	98953		1,000
Benzene, pentachloro-	608935		10
Benzene, pentachloronitro-	82688		100
Benzenesulfonic acid chloride (C,R)	98099		100
Benzenesulfonyl chloride	98099		100
Benzene, 1,2,4,5-tetrachloro-	95943		5,000
Benzenethiol	108985		100
Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	50293		1
Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-	72435		1
Benzene, (trichloromethyl)-	98077		10
Benzene, 1,3,5-trinitro-	99354		10
Benzidine	92875		1
Benzimidazole, 4,5-Dichloro-2-(Trifluoromethyl)-	3615212	500/10,000	1
1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81072		100
Benzo[a]anthracene	56553		10
Benzo[b]fluoranthene	205992		1
Benzo[k]fluoranthene	207089		5,000
Benzo[j,k]fluorene	206440		100
1,3-Benzodioxole, 5-(1-propenyl)-	120581		100
1,3-Benzodioxole, 5-(2-propenyl)-	94597		100
1,3-Benzodioxole, 5-propyl-	94586		10
Benzoic acid	65850		5,000
Benzonitrile	100470		5,000
Benzo[rst]pentaphene	189559		10
Benzo[ghi]perylene	191242		5,000
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations greater than 0.3%	81812		100
Benzo[a]pyrene	50328		1
3,4-Benzopyrene	50328		1
p-Benzoquinone	106514		10
Benzotrichloride (C,R,T)	98077	500	10

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Benzoyl chloride	98884		1,000
1,2-Benzphenanthrene	218019		100
Benzyl chloride	100447	500	100
Benzyl cyanide	140294	500	1
Beryllium [4]	7440417		10
Beryllium chloride	7787475		1
Beryllium fluoride	7787497		1
Beryllium nitrate	13597994 7787555		1
alpha-BHC	319846		10
beta-BHC	319857		1
delta-BHC	319868		1
gamma-BHC	58899		1
Bicyclo [2,2,1]Heptane-2-carbonitrile, 5-chloro-6-[((Methylamino)Carbonyl) Oxy]Imino)-,(1s-(1-alpha, 2-beta, 4-alpha, 5-alpha, 6E))-	15271417	500/10,000	1
2,2'-Bioxirane	1464535		10
Biphenyl	92524		100
(1,1'-Biphenyl)-4,4'diamine	92875		1
(1,1'-Biphenyl)-4,4'diamine, 3,3'dichloro-	91941		1
(1,1'-Biphenyl)-4,4'diamine, 3,3'dimethoxy-	119904		10
(1,1'-Biphenyl)-4,4'diamine, 3,3'dimethyl-	119937		10
Bis(chloromethyl) ketone	534076	10/10,000	1
Bis(2-chloroethyl)ether	111444		10
Bis(2-chloroethoxy)methane	111911		1,000
Bis(2-ethylhexyl)phthalate	117817		100
Bitoscanate	4044659	500/10,000	1
Boron trichloride	10294345	500	1
Boron trifluoride	7637072	500	1
Boron trifluoride compound with methyl ether (1:1)	353424	1,000	1
Bromoacetone	598312		1,000
Bromadiolone	28772567	100/10,000	1
Bromine	7726956	500	1
Bromoform	75252		100
4-Bromophenyl phenyl ether	101553		100
Brucine	357573		100
1,3-Butadiene	106990		10
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87683		1
1-Butanamine, N-butyl-N-nitroso-	924163		10
1-Butanol	71363		5,000
2-Butanone	78933		5,000
2-Butanone peroxide (R,T)	1338234		10
2-Butanone, 3,3-dimethyl-1-(methylthio)-, O[(methylamno)carbonyl] oxime	39196184		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
2-Butenal	123739 4170303		100
2-Butene, 1,4-dichloro- (I,T)	764410		1
2-Butenoic acid, 2-methyl-, 7[[2,3-dihydroxy-2-(1-meth- oxyethyl)-3-methyl-1-oxobutoxy] methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1-alpha(Z),7(2S*,3R*), 7a-alpha]]-	303344		10
Butyl acetate: iso-Butyl acetate sec-Butyl acetate tert-Butyl acetate	123864 110190 105464 540885		5,000
n-Butyl alcohol (I)	71363		5,000
Butylamine: iso-Butylamine sec-Butylamine tert-Butylamine	109739 78819 513495 13952846 75649		1,000
Butyl benzyl phthalate	85687		100
n-Butyl phthalate	84742		10
Butyric acid	107926		5,000
iso-Butyric acid	79312		
Cacodylic acid	75605		1
Cadmium (2+) [4]	7440439		10
Cadmium acetate	543908		10
Cadmium bromide	7789426		10
Cadmium chloride	10108642		10
Cadmium oxide	1306190	100/10,000	1
Cadmium stearate	2223930	1,000/10,000	1
Calcium arsenate	7778441	500/10,000	1
Calcium arsenite	52740166		1
Calcium carbide	75207		10
Calcium chromate	13765190		10
Calcium cyanamide	156627		1,000
Calcium cyanide Ca(CN)2	592018		10
Calcium dodecylbenzenesulfonate	26264062		1,000
Calcium hypochlorite	7778543		10
Camphechlor	8001352	500/10,000	1
Camphene, octachloro-	8001352		1
Cantharidin	56257	100/10,000	1
Carbachol chloride	51832	500/10,000	1
Caprolactum	105602		5,000
Captan	133062		10
Carbamic acid, ethyl ester	51796		100
Carbamic acid, methylnitroso-, ethyl ester	615532		1
Carbamic acid, Methyl-, 0-(((2,4-Dimethyl-1,3-Dithiolan-2-yl)Methyllene)Amino)-	26419738	100/10,000	1
Carbamic chloride, dimethyl-	79447		1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Carbamodithioic acid, 1,2-ethaneiylbis, salts & esters	111546		5,000
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303164		100
Carbaryl	63252		100
Carbofuran	1563662	10/10,000	10
Carbon disulfide	75150	10,000	100
Carbon oxyfluoride (R,T)	353504		1,000
Carbon tetrachloride	56235		10
Carbonic acid, dithallium(1 +) salt	6533739		100
Carbonic dichloride	75445		10
Carbonic difluoride	353504		1,000
Carbonochloridic acid, methyl ester	79221		1,000
Carbonyl Sulfide	463581		100
Carbophenothion	786196	500	1
Catechol	120809		100
Chloral	75876		5,000
Chlorambem	133904		100
Chlorambucil	305033		10
Chlordane	57749	1,000	1
Chlordane, alpha & gamma isomers	57749		1
Chlordane, technical	57749		1
Chlorfenvinfos	470906	500	1
Chlorinated champhene (Campheclor)	8001352		1
Chlorine	7782505	100	10
Chlormephos	24934916	500	1
Chlormequat chloride	999815	100/10,000	1
Chlornaphazine	494031		100
Choroacetaldehyde	107200		1,000
Chloroacetophenone	532274		100
Chloroacetic acid	79118	100/10,000	100
p-Chloroaniline	106478		1,000
Chlorobenzene	108907		100
Chlorobenzilate	510156		10
p-Chloro-m-cresol (4)	59507		5,000
1-Chloro-2,3-epoxypropane	106898		100
Chlorodibromomethane	124481		100
Chloroethane	75003		100
Chloroethanol	107073	500	1
Chloroethyl chlorofomate	627112	1,000	1
2-Chloroethyl vinyl ether	110758		1,000
Chloroform	67663	10,000	10
Chloromethane	74873		100
Chloromethyl ether	542881	100	1
Chloromethyl methyl ether	107302	100	1
beta-Chloronaphthalene	91587		5,000
2-Chloronaphthalene	91587		5,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Chlorophacinone	3691358	100/10,000	1
o-Chlorophenol (2)	95578		100
4-Chlorophenyl phenyl ether	7005723		5,000
1-(o-Chlorophenyl)thiourea	5344821		100
Chloroprene	126998		100
3-Chloropropionitrile	542767		1,000
Chlorosulfonic acid	7790945		1,000
4-Chloro-o-toluidine, hydrochloride	3165933		100
Chlorpyrifos	2921882		1
Chloroxuron	1982474	500/10,000	1
Chlorthiophos	21923239	500	1
Chromic acetate	1066304		1,000
Chromic acid	11115745 7738945		10
Chromic acid H_2CrO_4, calcium salt	13765190		10
Chromic chloride (Chromium chloride)	10025737	1/10,000	1
Chromic sulfate	10101538		1,000
Chromium [4]	7440473		5,000
Chromous chloride	10049055		1,000
Chrysene	218019		100
Cobalt, [(2,2'-(1,2-ethanediylbis (Nitrilo-methylidyne))Bis(6-fluoro-phenolato)](2-)-N,N',O,O')-,	62207765	100/10,000	1
Cobaltous bromide	7789437		1,000
Cobalt carbonyl	10210681	10/10,000	1
Cobaltous formate	544183		1,000
Cobaltous sulfamate	14017415		1,000
Coke Oven Emissions	NA		1
Colchicine	64868	10/10,000	1
Copper [4]	7440508		5,000
Copper cyanide	544923		10
Coumaphos	56724	100/10,000	10
Coumatetralyl	5836293	500/10,000	1
Creosote	8001589		1
Cresol(s) (Phenol, Methyl): m-Cresol o-Cresol p-Cresol	1319773 108394 95487 106445	1,000/10,000	100 100 100 100
Cresylic acid: m-Cresylic acid o-Cresylic acid p-Cresylic acid	1319773 108394 95487 106445		100 100 100 100
Crimidine	535897	100/10,000	1
Crotonaldehyde	123739 4170303	1,000 1,000	100 100
Cumene (I)	98828		5,000
Cupric acetate	142712		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Cupric acetoarsenite	12002038		1
Cupric chloride	7447394		10
Cupric nitrate	3251238		100
Cupric oxalate	5893663		100
Cupric sulfate	7758987		10
Cupric sulfate, ammoniated	10380297		100
Cupric tartrate	815827		100
Cyanides (soluble salts and complexes) not otherwise specified	57125		10
Cyanogen	460195		100
Cyanogen bromide	506683	500/10,000	1,000
Cyanogen chloride	506774		10
Cyanogen iodide (Iodine cyanide)	506785	1,000/10,000	1
Cyanophos	2636262	1,000	1
Cyanuric fluoride	675149	100	1
2,5-Cyclohexadiene-1,4-dione	106514		10
Cyclohexane (I)	110827		1,000
Cyclohexane, 1,2,3,4,5,6-hexachloro, (1-alpha, 2-alpha, 3-beta, 4-alpha, 5-alpha, 6-beta)-	58899		1
Cyclohexanone (I)	108941		5,000
2-Cyclohexanone	131895		100
Cycloheximide	66819	100/10,000	1
Cyclohexylamine	108918	10,000	1
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77474		10
Cyclophosphamide	50180		10
2,4-D Acid	94757		100
2,4-D Ester	94111 94791 94804 1320189 1928387 1928616 1929733 2971382 25168267 53467111		100
2,4-D, salts & esters (2,4-Dichlorophenoxyacetic Acid)	94757		100
Daunomycin	20830813		10
Decarborane(14)	17702419	500/10,000	1
Demeton	8065483	500	1
Demeton-S-Methyl	919868	500	1
DDD, 4,4'DDD	72548		1
DDE, 4,4'DDE	72559		1
DDT, 4,4'DDT	50293		1
DEHP (Diethylhexyl phthalate)	117817		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Diallate	2303164		100
Dialifor	10311849	100/10,000	1
Diazinon	333415		1
Diazomethane	334883		100
Dibenz[a,h]anthracene	53703		1
1,2:5,6-Dibenzanthracene	53703		1
Dibenzo[a,h]anthracene	53703		1
Dibenzofuran	132649		100
Dibenz[a,i]pyrene	189559		10
1,2-Dibromo-3-chloropropane	96128		1
Dibromoethane	106934		1
Diborane	19287457	100	1
Dibutyl phthalate	84742		10
Di-n-butyl phthalate	84742		10
Dicamba	1918009		1,000
Dichlobenil	1194656		100
Dichlone	117806		1
Dichlorobenzene	25321226		100
m-Dichlorobenzene (1,3)	541731		100
o-Dichlorobenzene (1,2)	95501		100
p-Dichlorobenzene (1,4)	106467		100
3,3'-Dichlorobenzidine	91941		1
Dichlorobromomethane	75274		5,000
1,4-Dichloro-2-butene (I,T)	764410		1
Dichlorodifluoromethane	75718		5,000
1,1-Dichloroethane	75343		1,000
1,2-Dichloroethane	107062		100
1,1-Dichloroethylene	75354		100
1,2-Dichloroethylene	156605		1,000
Dichloroethyl ether	11444	10,000	10
Dichloroisopropyl ether	108601		1,000
Dichloromethoxy ethane	111911		1,000
Dichloromethyl ether	542881		1
Dichloromethylphenylsilane	149746	1,000	1
2,4-Dichlorophenol	120832		100
2,6-Dichlorophenol	87650		100
Dichlorophenylarsine	696286		1
Dichloropropane	26638197		1,000
1,1-Dichloropropane	78999		
1,3-Dichloropropane	142289		
1,2-Dichloropropane	78875		1,000
Dichloropropane--Dichloropropene (mixture)	8003198		100
Dichloropropene	26952238		100
2,3-Dichloropropene	78886		
1,3-Dichloropropene	542756		100
2,2-Dichloropropionic acid	75990		5,000
Dichlorvos	62737	1,000	10

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Dicofol	115322		10
Dicrotophos	141662	100	1
Dieldrin	60571		1
1,2:3,4-Diepoxybutane (I,T)	1464535	500	10
Diethanolamine	111422		100
Diethyl chlorophosphate	814493	500	1
Diethylamine	109897		1,000
Diethylarsine	692422		1
Diethylcarbmazine citrate	1642542	100/10,000	1
1,4-Diethylenedioxide	123911		100
Diethylhexyl phthalate	117817		100
N,N-Diethylaniline	91667		1,000
N,N'-Diethylhydrazine	1615801		10
O,O-Diethyl S-methyl dithiophosphate	3288582		5,000
Diethyl-p-nitrophenyl phosphate	311455		100
Diethyl phthalate	84662		1,000
O,O-Diethyl O-pyrazinyl phosphorothioate	297972		100
Diethylstilbestrol	56531		1
Diethyl sulfate	64675		10
Digitoxin	71636	100/10,000	1
Diglycidyl ether	2238075	1,000	1
Digoxin	20830755	10/10,000	1
Dihydrosafrole	94586		10
Diisopropyfluorophosphate	55914		100
Diisopropylfluorophosphate, 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1-alpha, 4-alpha, 4a-beta, 5-alpha, 8-alpha, 8a-beta)-	309002		1
1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro, (1-alpha, 4-alpha, 4a-beta, 5a-beta, 8-beta, 8a-beta)-	465736		1
2,7:3,6-Dimethanonaphth[2,3 b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1a-alpha, 2-beta, 2a-alpha, 3-beta, 6-beta, 6a-alpha, 7beta, 7aalpha)-	60571		1
2,7:3,6 Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1a-alpha, 2-beta, 2a-beta, 3-alpha, 6-alpha, 6a-beta, 7-beta, 7a-alpha)-	72208		1
Dimethoate	60515		10
3,3'-Dimethoxybenzidine	119904		10
Dimefox	115264	500	1
Dimethoate	60515	500/10,000	10
Dimethyl Phosphorochloridothioate	2524030	500	1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Dimethyl sulfate	77781	500	100
Dimethylamine (l)	124403		1,000
p-Dimethylaminoazobenzene	60117		10
7,12-Dimethylbenz[a]anthracene	57976		1
3,3'-Dimethylbenzidine	119937		10
alpha,alpha-Dimethylbenzylhydroperoxide(R)	80159		10
Dimethylcarbamoyl chloride	79447		1
Dimethylformamide	68122		100
Dimethyldichlorosilane	75785	500	1
1,1-Dimethylhydrazine	57147	1,000	10
1,2-Dimethylhydrazine	540738		1
alpha, alpha-Dimethylphenethylamine	122098		5,000
Dimethyl-p-phenylenediamine	99989	10/10,000	1
2,4-Dimethylphenol	105679		100
Dimethyl phthalate	131113		5,000
Dimethyl sulfate	77781		100
Dimetilan	644644	500/10,000	1
Dinitrobenzene (mixed): m-Dinitrobenzene o-Dinitrobenzene p-Dinitrobenzene	25154545 99650 528290 100254		100
4,6-Dinitro-o-cresol and salts	534521	10/10,000	10
Dinitrophenol: 2,5-Dinitrophenol 2,6-Dinitrophenol	25550587 329715 573568		10
2,4-Dinitrophenol	51285		10
Dinitrotoluene	25321146		10
3,4-Dinitrotoluene	610399		
2,4-Dinitrotoluene	121142		10
2,6-Dinitrotoluene	606202		100
Dinoseb	88857	100/10,000	1,000
Dinoterb	1420071	500/10,000	1
Di-n-octyl phthalate	117840		5,000
1,4-Dioxane	123911		100
Dioxathion	78342	500	1
Diphacinone	82666	10/10,000	1
1,2-Diphenylhydrazine	122667		10
Diphosphoramide, octamethyl-	152169	100	100
Diphosphoric acid, tetraethyl ester	107493		10
Dipropylamine	142847		5,000
Di-n-propylnitrosamine	621647		10
Diquat	85007 2764729		1,000
Disulfoton	298044	500	1
Dithiazanine iodide	514738	500/10,000	1
Dithiobiuret	541537	100/10,000	100
Diuron	330541		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Dodecylbenzenesulfonic acid	27176870		1,000
Emetine, Dihydrochloride	316427	1/10,000	1
Endosulfan	115297	10/10,000	1
alpha-Endosulfan	959988		1
beta-Endosulfan	33213659		1
Endosulfant sulfate	1031078		1
Endothall	145733		1,000
Endothion	2778043	500/10,000	1
Endrin	72208	500/10,000	1
Endrin aldehyde	7421934		1
Endrin & metabolites	72208		1
Epichlorohydrin	106898	1,000	100
Epinephrine	51434		1,000
EPN	2104645	100/10,000	1
1,2-Epoxybutane	106887		100
Ergocalciferol	50146	1,000/10,000	1
Ergotamine tartrate	379793	500/10,000	1
Ethanal	75070		1,000
Ethanamine, N-ethyl-N-nitroso-	55185		1
1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91805		5,000
Ethane, 1,2-dibromo-	106934		1
Ethane, 1,1-dichloro-	75343		1,000
Ethane, 1,2-dichloro-	107062		100
Ethanedinitrile	460195		100
Ethane, hexachloro-	67721		100
Ethane, 1,1'-[methylenebis(oxy)]bis(2-chloro-	111911		1,000
Ethane, 1,1'-oxybis-	60297		100
Ethane, 1,1'-oxybis(2-chloro-	111444		10
Ethane, pentachloro-	76017		10
Ethanesulfonyl chloride, 2-chloro	1622328	500	1
Ethane, 1,1,1,2-tetrachloro-	630206		100
Ethane, 1,1,2,2-tetrachloro-	79345		100
Ethanethioamide	62555		10
Ethane, 1,1,1-trichloro-	71556		1,000
Ethane, 1,1,2-trichloro-	79005		100
Ethanimidothioic acid, N-[[(methylamino) carbonyl]oxy]-, methyl ester	16752775		100
Ethanol, 1,2-Dichloro-, acetate	10140871	1,000	1
Ethanol, 2-ethoxy-	110805		1,000
Ethanol, 2,2'-(nitrosoimino)bis-	1116547		1
Ethanone, 1-phenyl-	98862		5,000
Ethene, chloro-	75014		1
Ethene, 2-chloroethoxy-	110758		1,000
Ethene, 1,1-dichloro-	75354		100
Ethene, 1,2-dichloro- (E)	156605		1,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Ethene, tetrachloro-	127184		100
Ethene, trichloro-	79016		100
Ethion	563122	1,000	10
Ethoprophos	13194484	1,000	1
Ethyl acetate (I)	141786		5,000
Ethyl acrylate (I)	140885		1,000
Ethylbenzene	100414		1,000
Ethylbis(2-Chloroethyl)amine	538078	500	1
Ethyl carbamate (urethane)	51796		100
Ethyl chloride	75003		100
Ethyl cyanide	107120		10
Ethylenebisdithiocarbamic acid, salts & esters	111546		5,000
Ethylenediamine	107153		5,000
Ethylenediamine-tetraacetic acid (EDTA)	60004		5,000
Ethylene dibromide	106934		1
Ethylene dichloride	107062		100
Ethylene fluorohydrin	371620	10	1
Ethylene glycol	107211		5,000
Ethylene glycol monoethyl ether	110805		1,000
Ethylene oxide (I,T)	75218	1,000	10
Ethylenediamine	107153	10,000	5,000
Ethylenethiourea	96457		10
Ethyleneimine	151564	500	1
Ethyl ether (I)	60297		100
Ethylthiocyanate	542905	10,000	1
Ethylidene dichloride	75343		1,000
Ethyl methacrylate	97632		1,000
Ethyl methanesulfonate	62500		1
Famphur	52857		1,000
Fenamiphos	22224926	10/10,000	1
Fenitrothion	122145	500	1
Fensulfothion	115902	500	1
Ferric ammonium citrate	1185575		1,000
Ferric ammonium oxalate	2944674 55488874		1,000
Ferric chloride	7705080		1,000
Ferric fluoride	7783508		100
Ferric nitrate	10421484		1,000
Ferric sulfate	10028225		1,000
Ferrous ammonium sulfate	10045893		1,000
Ferrous chloride	7758943		100
Ferrous sulfate	7720787 7782630		1,000
Fluenetil	4301502	100/10,000	1
Fluoranthene	206440		100
Fluorene	86737		5,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Fluorine	7782414	500	10
Fluoroacetamide	640197	100/10,000	100
Fluoracetic acid	144490	10/10,000	1
Fluoroacetic acid, sodium salt	62786		10
Fluoroacetyl chloride	359068	10	1
Fluorouracil	51218	500/10,000	1
Fonofos	944229	500	1
Formaldehyde	50000	500	100
Formaldehyde cyanohydrin	107164	1,000	1
Formetanate hydrochloride	23422539	500/10,000	1
Formothion	2540821	100	1
Formparanate	17702577	100/10,000	1
Formic acid (C,T)	64186		5,000
Fosthletan	21548323	500	1
Fubendazole	3878191	100/10,000	1
Fulminic acid, mercury(2') salt (R,T)	628864		10
Fumaric acid	110178		5,000
Furan (I)	110009	500	100
Furan, tetrahydro- (I)	109999		1,000
2-Furancarboxaldehyde (I)	98011		5,000
2,5-Furandione	108316		5,000
Furfural (I)	98011		5,000
Furfuran (I)	110009		100
Gallium trichloride	13450903	500/10,000	1
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883664		1
D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-	18883664		1
Glycidylaldehyde	765344		10
Guanidine, N-methyl-N'-nitro-N-nitroso-	70257		10
Guthion	86500		1
Heptachlor	76448		1
Heptachlor epoxide	1024573		1
Hexachlorobenzene	118741		10
Hexachlorobutadiene	87683		1
Hexachlorocyclohexane (gamma isomer)	58899		1
Hexachlorocyclopentadiene	77474	100	10
Hexachloroethane	67721		100
Hexachlorophene	70304		100
Hexachloropropene	1888717		1,000
Hexaethyl tetraphosphate	757584		100
Hexamethylene-1, 6-diisocyanate	822060		100
Hexamethylphosphoramide	680319		1
Hexamethylenediamine, N,N'-Dibutyl	4835114	500	1
Hexane	110543		5,000
Hexone (Methyl isobutyl ketone)	108101		5,000
Hydrazine (R,T)	302012	1,000	1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Hydrazine, 1,2-diethyl-	1615801		10
Hydrazine, 1,1-dimethyl-	57147		10
Hydrazine, 1,2-dimethyl-	540738		1
Hydrazine, 1,2-diphenyl-	122667		10
Hydrazine, methyl-	60344		10
Hydrazinecarbothioamide	79196		100
Hydrochloric acid	7647010		5,000
Hydrocyanic acid	74908	100	10
Hydrofluoric acid	7664393		100
Hydrogen chloride (gas only)	7647010	500	5,000
Hydrogen cyanide	74908		10
Hydrogen fluoride	7664393	100	100
Hydrogen peroxide (Conc. >52%)	7722841	1,000	1
Hydrogen phosphide	7803512		100
Hydrogen selenide	7783075	10	1
Hydrogen sulfide	7783064	500	100
Hydroperoxide, 1-methyl-1-phenylethyl-	80159		10
Hydroquinone	123319	500/10,000	100
2-Imidazolidinethione	96457		10
Indeno(1,2,3-cd)pyrene	193395		100
Iodomethane	74884		100
Iron, Pentacarbonyl-	13463406	100	1
Isobenzan	297789	100/10,000	1
1,3-Isobenzofurandione	85449		5,000
Isobutyronitrile	78820	1,000	1
Isobutyl alcohol (I,T)	78831		5,000
Isocyanic acid, 3,4-Dichlorophenyl ester	102363	500/10,000	1
Isodrin	465736	100/10,000	1
Isofluorphate	55914	100	100
Isophorone	78591		5,000
Isophorone Diisocyanate	4098719	100	1
Isoprene	78795		100
Isopropanolamine dodecylbenzene sulfonate	42504461		1,000
Isopropyl chloroformate	108236	1,000	1
Isopropylmethylpryrazolyl dimethylcarbamate	119380	500	1
Isosafrole	120581		100
3(2H)-Isoxazolone, 5-(aminomethyl)-	2763964		1,000
Kepone	143500		1
Lactonitrile	78977	1,000	1
Lasiocarpine	303344		10
Lead acetate	301042		
Lead arsenate	7784409 7645252 10102484		1
Lead, bis(acetato-O)tetrahydroxytri	1335326		10
Lead chloride	7758954		10

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Lead fluoborate	13814965		10
Lead fluoride	7783462		10
Lead iodide	10101630		10
Lead nitrate	10099748		10
Lead phosphate	7446277		10
Lead stearate	7428480 1072351 52652592 56189094		10
Lead subacetate	1335326		10
Lead sulfate	15739807 7446142		10
Lead sulfide	1314870		10
Lead thiocyanate	592870		10
Leptophos	21609905	500/10,000	1
Lewisite	541253	10	1
Lindane	58899	1,000/10,000	1
Lithium chromate	14307358		10
Lithium hydride	7580678	100	1
Malathion	121755		100
Maleic acid	110167		5,000
Maleic anhydride	108316		5,000
Maleic hydrazide	123331		5,000
Malononitrile	109773	500/10,000	1,000
Manganese, tricarbonyl methylcyclopentadienyl	12108133	100	1
MDI (Methylene diphenyl diisocyanate)	101688		5,000
Mechlorethamine	51752	10	1
MEK (Methyl ethyl ketone)	78933		5,000
Melphalan	148823		1
Mephosfolan	950107	500	1
Mercaptodimethur	2032657		10
Mercuric acetate	1600277	500/10,000	1
Mercuric chloride	7487947	500/10,000	1
Mercuric cyanide	592041		1
Mercuric nitrate	10045940		10
Mercuric oxide	21908532	500/10,000	1
Mercuric sulfate	7783359		10
Mercuric thiocyanate	592858		10
Mercurous nitrate	10415755 7782867		10
Mercury	7439976		1
Mercury (acetate-O)phenyl-	62384		100
Mercury fulminate	628864		10
Methacrolein diacetate	10476956	1,000	1
Methacrylic anhydride	760930	500	1
Methacrylonitrile (I,T)	126987	500	1,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Methacryloyl chloride	920467	100	1
Methacryloyloxyethyl isocyanate	30674807	100	1
Methamidophos	10265926	100/10,000	1
Methanamine, N-methyl-	124403		1,000
Methanamine, N-methyl-N-nitroso-	62759		10
Methane, bromo-	74839		1,000
Methane, chloro- (I,T)	74873		100
Methane, chloromethoxy-	107302		1
Methane, dibromo-	74953		1,000
Methane, dichloro-	75092		1,000
Methane, dichlorodifluoro-	75718		5,000
Methane, iodo-	74884		100
Methane, isocyanato-	624839		10
Methane, oxybis[chloro-	542881		1
Methanesulfenyl chloride, trichloro-	594423		100
Methanesulfonyl fluoride	558258	1,000	1
Methanesulfonic acid, ethyl ester	62500		1
Methane, tetrachloro-	56235		10
Methane, tetranitro- (R)	509148		10
Methane, tribromo-	75252		100
Methane, trichloro-	67663		10
Methane, trichlorofluoro-	75694		5,000
Methanethiol (I,T)	74931		100
6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10, 10-hexa-chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	115297		1
1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5a,5b,6-decachloroctahydro-	143500		1
4,7-Methano-1H-indene, 1,4,5,6,7,8,8 heptachloro-3a,4,7,7a-tetrahydro-	76448		1
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8 octachloro-2,3,3a,4,7,7a-hexahydro-	57749		1
Methanol (I)	67561		5,000
Methapyrilene	91805		5,000
Methidathion	950378	500/10,000	1
Methiocarb	2032657	500/10,000	10
Methomyl	16752775	500/10,000	100
Methoxychlor	72435		1
Methoxyethylmercuric acetate	151382	500/10,000	1
Methyl alcohol (I)	67561		5,000
Methyl aziridine	75558		1
Methyl bromide	74839	1,000	1,000
1-Methylbutadiene (I)	504609		100
Methyl chloride (I,T)	74873		100
Methyl 2-chloroacrylate	80637	500	1
Methyl chlorocarbonate (I,T)	79221		1,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Methyl chloroform	71556		1,000
Methyl chloroformate	79221	500	1,000
3-Methylcholanthrene	56495		10
4,4'-Methylenebis(2-chloroaniline)	101144		10
Methylene bromide	74953		1,000
Methylene chloride	75092		1,000
4,4'-Methylenedianiline	101779		10
Methylene diphenyl diisocyanate (MDI)	101688		5,000
Methyl ethyl ketone (MEK) (I,T)	78933		5,000
Methyl ethyl ketone peroxide (R,T)	1338234		10
Methyl hydrazine	60344	500	10
Methyl iodide	74884		100
Methyl isobutyl ketone	108101		5,000
Methyl isocyanate	624839	500	10
Methyl isothiocyanate	556616	500	1
2-Methyllactonitrile	75865		10
Methyl mercaptan	74931	500	100
Methyl methacrylate (I,T)	80626		1,000
Methyl parathion	298000		100
Methyl phenkapton	3735237	500	1
Methyl phosphonic dichloride	676971	100	1
4-Methyl-2-pentanone (I)	108101		5,000
Methyl tert-butyl ether	1634044		1,000
Methyl thiocyanate	556649	10,000	1
Methylthiouracil	56042		10
Methyl vinyl ketone	78944	10	1
Methylmercuric dicyanamide	502396	500/10,000	1
Methyltrichlorosilane	75796	500	1
Metolcarb	1129415	100/10,000	1
Mevinphos	7786347	500	10
Mexacarbate	315184	500/10,000	1,000
Mitomycin C	50077	500/10,000	10
MNNG	70257		10
Monocrotophos	6923224	10/10,000	1
Monoethylamine	75047		100
Monomethylamine	74895		100
Muscimol	2763964	500/10,000	1,000
Mustard gas	505602	500	1
Naled	300765		10
5,12-Naphthaacenedione, 8-acetyl-10-[3 amino-2,3,6-tri-deoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830813		10
1-Naphthalenamine	134327		100
2-Naphthalenamine (beta-Naphthylamine)	91598		1
Naphthalenamine, N,N'-bis(2-chloroethyl)-	494031		100
Naphthalene	91203		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Naphthalene, 2-chloro-	91587		5,000
1,4-Naphthalenedione	130154		5,000
2,7-Naphthalenedisulfonic acid, 3,3' [(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-dryl)-bis(azo)] bis(5-amino-4-hydroxy)-tetrasodium salt	72571		10
Naphthenic acid	1338245		100
1,4-Naphthoquinone	130154		5,000
alpha-Naphthylamine	134327		100
beta-Naphthylamine (2-Naphthalenamine)	91598		1
alpha-Naphthylthiourea	86884		100
Nickel [4]	7440020		100
Nickel ammonium sulfate	15699180		100
Nickel carbonyl	13463393	1	10
Nickel carbonyl Ni(CO)4, (T-4)-	13463393		10
Nickel chloride	7718549 37211055		100
Nickel cyanide	557197		10
Nickel hydroxide	12054487		10
Nickel nitrate	14216752		100
Nickel sulfate	7786814		100
Nicotine & salts	54115	100	100
Nicotine sulfate	65305	100/10,000	1
Nitric acid	7697372	1,000	1,000
Nitric acid, thallium(1 +) salt	10102451		100
Nitric oxide	10102439	100	10
p-Nitroaniline	100016		5,000
Nitrobenzene (I,T)	98953	10,000	1,000
4-Nitrobiphenyl	92933		10
Nitrocyclohexane	1122607	500	1
Nitrogen dioxide	10102440 10544726	100	10
Nitrogen oxide	10102439		10
Nitroglycerine	55630		10
Nitrophenol (mixed): m-Nitrophenol o-Nitrophenol (2) p-Nitrophenol (4)	25154556 554847 88755 100027		100 100 100 100
2-Nitropropane (I,T)	79469		10
N-Nitrosodi-n-butylamine	924163		10
N-Nitrosodiethanolamine	1116547		1
N-Nitrosodiethylamine	55185		1
N-Nitrosodimethylamine	62759	1,000	10
N-Nitrosodiphenylamine	86306		100
N-Nitroso-N-ethylurea	759739		1
N-Nitroso-N-methylurea	684935		1
N-Nitroso-N-methylurethane	615532		1
N-Nitrosomethylvinylamine	4549400		10

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
N-Nitrosomorpholine	59892		1
N-Nitrosopiperidine	100754		10
N-Nitrosopyrrolidine	930552		1
Nitrotoluene:	1321126		1,000
m-Nitrotoluene	99081		
o-Nitrotoluene	88722		
p-Nitrotoluene	99990		
5-Nitro-o-toluidine	99558		100
Norbromide	991424	100/10,000	1
Octamethylpyrophosphoramide	152169		100
Organorhodium complex (PMN-82-147)	0	10/10,000	1
Osmium tetroxide	20816120		1,000
Ouabain	630604	100/10,000	1
7-Oxabicyclo[2,2,1]heptane-2,3-dicarboxylic acid	145733		1,000
Oxamyl	23135220	100/10,000	1
1,2-Oxathiolane, 2,2-dioxide	1120714		10
2H-1,3,2-Oxazaphosphorin-2-amine, N,N bis (2-chloroethyl)tetrahydro-, 2-oxide	50180		10
Oxetane, 3,3-bis(chloromethyl)-	78717	500	1
Oxirane (I,T)	75218		10
Oxiranecarboxyaldehyde	765344		10
Oxirane, (chloromethyl)-	106898		100
Oxydisulfoton	2497076	500	1
Ozone	10028156	100	1
Paraformaldehyde	30525894		1,000
Paraldehyde	123637		1,000
Paraquat	1910425	10/10,000	1
Paraquat methosulfate	2074502	10/10,000	1
Parathion	56382	100	10
Parathion-methyl	298000	100/10,000	100
Paris green	12002038	500/10,000	100
PCBs:	1336363		
Aroclor 1016	12674112		1
Aroclor 1221	11104282		1
Aroclor 1232	11141165		1
Aroclor 1242	53469219		1
Aroclor 1248	12672296		1
Aroclor 1254	11097691		1
Aroclor 1260	11096825		1
PCNB (Pentachloronitrobenzene)	82688		100
Pentaborane	19624227	500	1
Pentachlorobenzene	608935		10
Pentachloroethane	76017		10
Pentachlorophenol	87865		10
Pentachloronitrobenzene (PCNB)	82688		100
Pentadecylamine	2570265	100/10,000	1
Paracetic acid	79210	500	1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
1,3-Pentadiene (I)	504609		100
Perachloroethylene	127184		100
Perchloromethylmercaptan	594423	500	100
Phenacetin	62442		100
Phenanthrene	85018		5,000
Phenol	108952	500/10,000	1,000
Phenol, 2-chloro-	95578		100
Phenol, 4-chloro-3-methyl-	59507		5,000
Phenol, 2-cyclohexyl-4,6-dinitro-	131895		100
Phenol, 2,4-dichloro-	120832		100
Phenol, 2,6-dichloro-	87650		100
Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	56531		1
Phenol, 2,4-dimethyl-	105679		100
Phenol, 2,4-dinitro-	51285		10
Phenol, methyl-: m-Cresol o-Cresol p-Cresol	1319773 108394 95487 106445		1,000
Phenol, 2-methyl-4,6-dinitro-and salts	534521		10
Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70304		100
Phenol, 2,2'-thiobis(4-chloro-6-methyl)-	4418660	100/10,000	1
Phenol, 2-(1-methylpropyl)-4,6-dinitro	88857		1,000
Phenol, 3-(1-methylethyl)-, methylcarbamate	64006	500/10,000	1
Phenol, 4-nitro-	100027		100
Phenol, pentachloro-	87865		10
Phenol, 2,3,4,6-tetrachloro-	58902		10
Phenol, 2,4,5-trichloro-	95954		10
Phenol, 2,4,6-trichloro-	88062		10
Phenol, 2,4,6-trinitro-, ammonium salt	131748		10
Phenoxarsine, 10,10'-oxydi-	58366	500/10,000	1
L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]	148823		1
Phenyl dichloroarsine	696286	500	1
1,10-(1,2-Phenylene)pyrene	193395		100
p-Phenylenediamine	106503		5,000
Phenylhydrazine hydrochloride	59881	1,000/10,000	1
Phenylmercury acetate	62384	500/10,000	100
Phenylsilatrane	2097190	100/10,000	1
Phenylthiourea	103855	100/10,000	100
Phorate	298022	10	10
Phosacetim	4104147	100/10,000	1
Phosfolan	947024	100/10,000	1
Phosgene	75445	10	10
Phosmet	732116	10/10,000	1
Phosphamidon	13171216	100	1
Phosphine	7803512	500	100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Phosphorothioic acid, o,o-Dimethyl-s (2-Methylthio) ethyl ester	2587908	500	1
Phosphorothioic acid, methyl-, o-ethyl o-(4-(methylthio)phenyl) ester	2703131	500	1
Phosphorothioic acid, methyl-, s-(2-(bis(1-methylethyl)amino)ethyl o-ethyl ester	50782699	100	1
Phosphorothioic acid, methyl-, 0-(4-nitrophenyl) o-phenyl ester	2665307	500	1
Phosphoric acid	7664382		5,000
Phosphoric acid, diethyl 4-nitrophenyl ester	311455		100
Phosphoric acid, dimethyl 4-(methylthio) phenyl ester	3254635	500	1
Phosphoric acid, lead(2+) salt (2:3)	7446277	500	10
Phosphorodithioic acid, O,O-diethyl S-[2 (ethylthio)ethyl]ester	298044		1
Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester	298022		10
Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288582		5,000
Phosphorodithoic acid, O,O-dimethyl S-[2(methyl-amino)-2-oxoethyl] ester	60515		10
Phosphorofluondic acid, bis(1-methylethyl) ester	55914		100
Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56382		10
Phosphorothioic acid, O,[4-[(dimethylamino)sulfonyl]phenyl]O,O-dimethyl ester	52857		1,000
Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298000		100
Phosphorothioic acid, 0,0-diethyl 0 pyrazinyl ester	297972		100
Phosphorus	7723140	100	1
Phosphorus oxychloride	10025873	500	1,000
Phosphorous pentachloride	10026138	500	1
Phosphorus pentasulfide (R)	1314803		100
Phosphorus pentoxide	1314563	10	1
Phosphorus trichloride	7719122	1,000	1,000
Phthalic anhydride	85449		5,000
Physostigmine	57476	100/10,000	1
Phosostigmine, salicylate (1:1)	57647	100/10,000	1
2-Picoline	109068		5,000
Picotoxin	124878	500/10,000	1
Piperidine	110894	1,000	1
Piperidine, 1-nitroso-	100754		10
Pirimifos-ethyl	23505411	1,000	1
Plumbane, tetraethyl-	78002		10

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Polychlorinated biphenyls (See PCBs or Aroclor)	1336363		1
Potassium arsenate	7784410		1
Potassium arsenite	10124502	500/10,000	1
Potassium bichromate	7778509		10
Potassium chromate	7789006		10
Potassium cyanide	151508	100	10
Potassium hydroxide	1310583		1,000
Potassium permanganate	7722647		100
Potassium silver cyanide	506616	500	1
Promecarb	2631370	500/10,000	1
Pronamide	23950585		5,000
Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime	116063		1
1-Propanamine (I,T)	107108		5,000
1-Propanamine, N-propyl-	142847		5,000
1-Propanamine, N-nitroso-N-propyl-	621647		10
Propane, 1,2-dibromo-3-chloro	96128		1
Propane, 2-nitro- (I,T)	79469		10
1,3-Propane sultone	1120714		10
Propane 1,2-dichloro-	78875		1,000
Propanedinitrile	109773		1,000
Propanenitrile	107120		10
Propanenitrile, 3-chloro-	542767		1,000
Propanenitrile, 2-hydroxy-2-methyl-	75865		10
Propane, 2,2'-oxybis[2-chloro-	108601		1,000
1,2,3-Propanetnol, trinitrate- (R)	55630		10
1-Propanol, 2,3-dibromo-, phosphate (3:1)	126727		10
1-Propanol, 2-methyl- (I,T)	78831		5,000
2-Propanone (I)	67641		5,000
2-Propanone, 1-bromo-	598312		1,000
Propargite	2312358		10
Propargyl alcohol	107197		1,000
Propargyl bromide	106967	10	1
2-Propenal	107028		1
2-Propenamide	79061		5,000
1-Propene, 1,1,2,3,3,3-hexachloro-	1888717		1,000
1-Propene, 1,3-dichloro-	542756		100
2-Propenenitrile	107131		100
2-Propenenitrile, 2-methyl- (I,T)	126987		1,000
2-Propenoic acid (I)	79107		5,000
2-Prepenoic acid, ethyl ester (I)	140885		1,000
2-Prepenoic acid, 2-methyl-, ethyl ester	97632		1,000
2-Prepenoic acid, 2-methyl-, methyl ester (I,T)	80626		1,000
2-Propen-1-o1	107186		100
Propiolactone, beta-	57578	500	1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Propionaldehyde	123386		1,000
Propionic acid	79094		5,000
Propionic acid, 2-(2,4,5-trichlorophenoxyl)-	93721		100
Propionic anhydride	123626		5,000
Propoxor (Baygon)	114261		100
Propionitrile	107120	500	10
Propionitrile, 3-chloro-	542767	1,000	1,000
Propiophenone, 1, 4-amino phenyl	70699	100/10,000	1
n-Propylamine	107108		5,000
Propyl chloroformate	109615	500	1
Propylene dichloride	78875		1,000
Propylene oxide	75569	10,000	100
1,2-Propylenimine	75558	10,000	1
2-Propyn-1-o1	107197		1,000
Prothoate	2275185	100/10,000	1
Pyrene	129000	1,000/10,000	5,000
Pyrethrins	121299 121211 8003347		1
3,6-Pyridazinedione, 1,2-dihydro-	123331		5,000
4-Pyridinamine	504245		1,000
Pyridine	110861		1,000
Pyridine, 2-methyl-	109068		5,000
Pyridine, 2-methyl-5-vinyl-	140761	500	1
Pyridine, 4-amino-	504245	500/10,000	1,000
Pyridine, 4-nitro-, 1-oxide	1124330	500/10,000	1
Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)	54115		100
2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66751		10
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56042		10
Pyriminil	53558251	100/10,000	1
Pyrrolidine, 1-nitroso-	930552		1
Quinoline	91225		5,000
Quinone (p-Benzoquinone)	106514		10
Quintobenzene	82688		100
Reserpine	50555		5,000
Resorcinol	108463		5,000
Saccharin and salts	81072		100
Salcomine	14167181	500/10,000	1
Sarin	107448	10	1
Safrole	94597		100
Selenious acid	7783008	1,000/10,000	10
Selenious acid, dithallium (1+) salt	12039520		1,000
Selenium [4]	7782492		100
Selenium dioxide	7446084		10
Selenium oxychloride	7791233	500	1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Selenium sulfide (R,T)	7488564		10
Selenourea	630104		1,000
Semicarbazide hydrochloride	563417	1,000/10,000	1
L-Serine, diazoacetate (ester)	115026		1
Silane, (4-aminobutyl)diethoxymethyl-	3037727	1,000	1
Silver [4]	7440224		1,000
Silver cyanide	506649		1
Silver nitrate	7761888		1
Silvex (2,4,5-TP)	93721		100
Sodium	7440235		10
Sodium arsenate	7631892	1,000/10,000	1
Sodium arsenite	7784465	500/10,000	1
Sodium azide	26628228	500	1,000
Sodium bichromate	10588019		10
Sodium bifluoride	1333831		100
Sodium bisulfite	7631905		5,000
Sodium cacodylate	124652	100/10,000	1
Sodium chromate	7775113		10
Sodium cyanide	143339	100	10
Sodium dodecylbenzenesulfonate	25155300		1,000
Sodium fluoride	7681494		1,000
Sodium fluoroacetate	62748	10/10,000	10
Sodium hydrosulfide	16721805		5,000
Sodium hydroxide	1310732		1,000
Sodium hypochlorite	7681529 10022705		100
Sodium methylate	124414		1,000
Sodium nitrite	7632000		100
Sodium prentachlorophenate	131522	100/10,000	1
Sodium phosphate, dibasic	7558794 10039324 10140655		5,000
Sodium phosphate, tribasic	7601549 7758294 7785844 10101890 10124568 10361894		5,000
Sodium selenate	13410010	100/10,000	1
Sodium selenite	10102188 7782823	100/10,000	100
Sodium tellurite	10102202	500/10,000	1
Stannane, acetoxytriphenyl	900958	500/10,000	1
Streptozotocin	18883664		1
Strontium chromate	7789062		10
Strychnidin-10-one	57249		10
Strychnidin-10-one, 2,3-dimethoxy-	357573		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Strychnine, & salts	572494	100/10,000	10
Strychnine sulfate	60413	100/10,000	1
Styrene	100425		1,000
Styrene oxide	96093		100
Sulfotep	3689245	500	100
Sulfoxide, 3-chloropropyl octyl	3569571	500	1
Sulfur monochloride	12771083		1,000
Sulfur dioxide	7446095	500	1
Sulfur phosphide (R)	1314803		100
Sulfur tetrafluoride	7783600	100	1
Sulfur trioxide	7446119	100	1
Sulfuric acid	7664939 8014957	1,000	1,000
Sulfuric acid, dithallium (1 +) salt	7446186 10031591		100
Sulfuric acid, dimethyl ester	77781		100
Tabun	77816	10	1
2,4,5-T acid	93765		1,000
2,4,5-T amines	2008460 1319728 3813147 6369966 6369977		5,000
Tellurium	13494809	500/10,000	1
Tellurium hexafluoride	7783804	100	1
2,4,5-T esters	93798 1928478 2545597 25168154 61792072		1,000
2,4,5-T salts	13560991		1,000
2,4,5-T	93765		1,000
TDE (Dichloro diphenyl dichloroethane)	72548		1
TEPP (Tetraethyl ester diphosphoric acid)	107493	100	10
Terbufos	13071799	100	1
1,2,4,5-Tetrachlorobenzene	95943		5,000
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746016		1
1,1,1,2-Tetrachloroethane	630206		100
1,1,2,2-Tetrachloroethane	79345		100
Tetrachloroethene	127184		100
Tetrachloroethylene	127184		100
2,3,4,6-Tetrachlorophenol	58902		10
Tetraethyl lead	78002	100	10
Tetraethyl pyrophosphate	107493		10
Tetraethyldithiopyrophosphate	3689245		100
Tetraethyltin	597648	100	1
Tetramethyllead	75741	100	1

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Tetrahydrofuran (I)	109999		1,000
Tetranitromethane (R)	509148	500	10
Tetraphosphoric acid, hexaethyl ester	757584		100
Thallic oxide	1314325		100
Thallium [4]	7440280		1,000
Thallium acetate	563688		100
Thallium carbonate	6533739		100
Thallium chloride	7791120		100
Thallium nitrate	10102451		100
Thallium oxide	1314325		100
Thallium selenite	12039520		1,000
Thallium sulfate	7446186 10031591	100/10,000	100
Thallous carbonate (Thallium (I) carbonate)	6533739	100/10,000	100
Thallous chloride (Thallium (I) chloride)	7791120	100/10,000	100
Thallous malonate (Thallium (I) malonate)	2757188	100/10,000	1
Thallous sulfate (Thallium (I) sulfate)	7446186	100/10,000	100
Thioacetamide	62555		10
Thiocarbazide	2231574	1,000/10,000	1
Thiodiphosphoric acid, tetraethyl ester	3689245		100
Thiofanox	39196184	100/10,000	100
Thioimidodicarbonic diamide [(H2N)C(S)] 2NH	541537		100
Thiomethanol (I,T)	74931		100
Thionazin	297972	500	100
Thioperoxydicarbonic diamide [(H2N)C(S)] 2S2, tetra-methyl-	137268		10
Thiophenol	108985	500	100
Thiosemicarbazide	79196	100/10,000	100
Thiourea	62566		10
Thiourea, (2-chlorophenyl)-	5344821	100/10,000	100
Thiourea, (2-methylphenyl)-	614788	500/10,000	1
Thiourea, 1-naphthalenyl-	86884		100
Thiourea, phenyl-	103855		100
Thiram	137268		10
Titanium tetrachloride	7550450	100	1,000
Toluene	108883		1,000
Toluenediamine	95807 496720 823405 25376458		10
Toluene diisocyanate (R,T)	584849 91087 26471625	500	100
o-Toluidine	95534		100
p-Toluidine	106490		100
o-Toluidine hydrochloride	636215		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Toxaphene	8001352		1
2,4,5-TP acid	93721		100
2,4,5-TP acid esters	32534955		100
1H-1,2,4-Triazol-3-amine	61825		10
Trans-1,4-dichlorobutene	110576	500	1
Triamiphos	1031476	500/10,000	1
Triazofos	24017478	500	1
Trichloroacetyl chloride	76028	500	1
Trichlorfon	52686		100
1,2,4-Trichlorobenzene	120821		100
1,1,1-Trichloroethane	71556		1,000
1,1,2-Trichloroethane	79005		100
Trichloroethene	79016		100
Trichloroethylene	79016		100
Trichloroethylsilane	115219	500	1
Trichloronate	327980	500	1
Trichloromethanesulfenyl chloride	594423		100
Trichloromonofluoromethane	75694		5,000
Trichlorophenol:	21567822		10
2,3,4-Trichlorophenol	15950660		
2,3,5-Trichlorophenol	933788		
2,3,6-Trichlorophenol	933755		
2,4,5-Trichlorophenol	95954		10
2,4,6-Trichlorophenol	88062		10
3,4,5-Trichlorophenol	609198		
Trichlorophenylsilane	98135	500	1
Trichloro(chloromethyl)silane	1558254	100	1
Trichloro(dichlorophenyl)silane	27137855	500	1
Triethanolamine dodecylbenzene-sulfonate	27323417		1,000
Triethoxysilane	998301	500	1
Trifluralin	1582098		10
Triethylamine	121448		5,000
Trimethylamine	75503		100
Trimethylchlorsilane	75774	1,000	1
2,2,4-Trimethylpentane	540841		1,000
Trimethylolpropane phosphite	824113	100/10,000	1
Trimethyiltin chloride	1066451	500/10,000	1
1,3,5-Trinitrobenzene (R,T)	99354		10
1,3,5-Trioxane, 2,4,6-trimethyl-	123637		1,000
Triphenyltin chloride	639587	500/10,000	1
Tris(2-chloroethyl)amine	555771	100	1
Tris(2,3-dibromopropyl) phosphate	126727		10
Trypan blue	72571		10
Unlisted Hazardous Wastes Characteristic of **Ignitability**	NA		100
Unlisted Hazardous Wastes Characteristic of **Corrosivity**	NA		100

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Unlisted Hazardous Wastes Characteristic of **Reactivity**	NA		100
Unlisted Hazardous Wastes Characteristic of **Toxicity:**			
Chlordane			1
Chlorobenzene			100
Chloroform			10
Chromium			10
o-Cresol			100
m-Cresol			100
p-Cresol			100
Cresol			100
2,4-D (Dichlorophenoxyacetic acid)			100
1,4-Dichlorobenzene			100
1,2-Dichloroethane			100
1,1-Dichloroethylene			100
2,4-Dinitrotoluene			10
Endrin			1
Heptachlor (and epoxide)			1
Hexachlorobenzene			10
Hexachlorobutadiene			1
Hexachloroethane			100
Lead			10
Lindane			1
Mercury			1
Methoxychlor			1
Methyl ethyl ketone			5,000
Nitrobenzene			1,000
Pentachlorophenol			10
Pyridine			1,000
Selenium			10
Silver			1
Tetrachloroethylene			100
Toxaphene			1
Trichloroethylene			100
2,4,5 Trichlorophenol			10
2,4,5-TP			100
Vinyl chloride			1
Uracil mustard	66751		10
Uranyl acetate	541093		100
Uranyl nitrate	10102064 36478769		100
Urea, N-ethyl-N-nitroso	759739		1
Urea, N-methyl-N-nitroso	684935		1
Urethane (Carbamic acid ethyl ester)	51796		100
Valinomycin	2001958	1,000/10,000	1
Vanadic acid, ammonium salt	7803556		1,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Vanadic oxide V_2O_5	1314621		1,000
Vanadic pentoxide	1314621		1,000
Vanadium pentoxide	1314621	100/10,000	1,000
Vanadyl sulfate	27774136		1,000
Vinyl chloride	75014		1
Vinyl acetate	108054		5,000
Vinyl acetate monomer	108054	1,000	5,000
Vinylamine, N-methyl-N-nitroso-	4549400		10
Vinyl bromide	593602		100
Vinylidene chloride	75354		100
Warfarin, & salts, when present at concentrations greater than 0.3%	81812	500/10,000	100
Warfarin sodium	129066	100/10,000	100
Xylene (mixed): m-Benzene, dimethyl o-Benzene, dimethyl p-Benzene, dimethyl	1330207 108383 95476 106423		100 1,000 1,000 100
Xylenol	1300716		1,000
Xylylene dichloride	28347139	100/10,000	1
Yohimban-16-carboxylic acid, 11,17 dimethoxy-18-[(3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester (3-beta, 16-beta,17-alpha,18-beta,20-alpha)-	50555		5,000
Zinc [4]	7440666		1,000
Zinc acetate	557346		1,000
Zinc ammonium chloride	52628258 14639975 14639986		1,000
Zinc borate	1332076		1,000
Zinc bromide	7699458		1,000
Zinc carbonate	3486359		1,000
Zinc chloride	7646857		1,000
Zinc cyanide	557211		10
Zinc, dichloro(4,4-dimethyl-5(((((methyl-amino)carbonyl)oxy)imino)pentaenitrile)-,(t-4)-	58270089	100/10,000	1
Zinc fluoride	7783495		1,000
Zinc formate	557415		1,000
Zinc hydrosulfite	7779864		1,000
Zinc nitrate	7779886		1,000
Zinc phenosulfonate	127822		5,000
Zinc phosphide	1314847	500	100
Zinc phosphide Zn_3P_2, when present at concentrations greater than 10%	1314847		100
Zinc silicofluoride	16871719		5,000
Zinc sulfate	7733020		1,000
Zirconium nitrate	13746899		5,000
Zirconium potassium fluoride	16923958		1,000

Hazardous Substance/Material	CAS No.[1]	Threshold Planning Quantity (Pounds)[2]	RQ (Pounds)[3]
Zirconium sulfate	14644612		5,000
Zirconium tetrachloride	10026116		5,000

Notes:

1. Chemical Abstract Service (CAS) Registry Number.
2. Quantity in storage above which Environmental Executive Agent must be notified (See Chapter 5).
3. Reportable quantity release which requires notification (See Chapter 18).
4. No reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is equal to or exceeds 100 micrometers (0.004 inches).
5. The RQ for asbestos is limited to friable forms only.

SCOPE & DEFINITIONS

This Chapter contains criteria to plan for, prevent, control, report, and clean up spills of petroleum, oils, and lubricants (POL) and hazardous substances. It is DoD policy to prevent spills of these substances due to DoD activities and to provide for prompt, coordinated response to contain and clean up spills that might occur.

Agenzia Nazionale di Protezione Ambientale (ANPA) – The Italian National Environmental Protection Agency.

Hazardous Substance – Any substance having the potential to do serious harm to human health or the environment if spilled or released in reportable quantity. A list of these substances and the corresponding reportable quantities is contained in Appendix A. The term does not include:

- Petroleum (including crude POL or any fraction thereof) which is not otherwise specifically listed or designated as a hazardous substance above
- Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)

Facility Incident Commander (FIC) (previously known as the Installation On-scene Coordinator) – The official who coordinates and directs DoD control and cleanup efforts at the scene of a POL or hazardous substance spill due to DoD activities on or near the installation. This official is designated by the installation commander.

Facility Response Team (FRT) (previously known as the Installation Response Team) – A team performing emergency functions as defined and directed by the FIC.

Oil – POL of any kind or in any form, including (but not limited to) petroleum, fuel POL, sludge, POL refuse, and POL mixed with wastes other than dredged spoil.

POL – Refined petroleum, oils, and lubricants.

Significant Spill – An uncontained release to the land or water in excess of any of the following quantities:

- For a dangerous waste or hazardous substance identified as a result of inclusion in Appendix A, any quantity in excess of the reportable quantity listed in Appendix A.
- For POL or liquid or semi-liquid hazardous material, hazardous substance, or dangerous waste, in excess of 400 liters (110 gallons)
- For other solid hazardous material, in excess of 225 Kg (500 pounds)
- For combinations of POL and liquid, semi-liquid, and solid hazardous materials, hazardous substances, or dangerous waste in excess of 340 Kg (750 pounds)

If a spill is contained (inside an impervious berm, or on a nonporous surface, or inside a building), is not volatilized, and is cleaned up, the spill is considered a contained release and is not considered a significant spill.

Worst Case Discharge - The largest foreseeable discharge from the facility, under adverse weather conditions, as determined using as a guide the worst case discharge planning volume criteria at Appendix C.

CRITERIA

C18.1 SPILL RESPONSE

Installations will initiate response actions in accordance with their installation Spill Prevention and Response Plan.

C18.1.1 Immediate actions will be taken to eliminate the source of and contain the spill.

C18.1.2 Any significant spill will be reported to the FIC immediately.

C18.2 PLAN REQUIREMENT

All DoD installations will prepare and maintain a Spill Prevention and Response Plan, that provides for the prevention, control, and reporting of POL and hazardous substance spills.

The plan will provide measures to prevent and, to the maximum extent practicable, to remove a worst case discharge from the facility.

The plan will be updated at least every 5 years or when there are significant changes to operations or facilities.

The plan should be kept in a location easily accessible to the FIC and FRT.

The plan will consist of:

C18.2.1 Prevention Section. The prevention section of the plan will, at a minimum, contain the following:

C18.2.1.1 Name, title, responsibilities, duties, and 24-hour telephone number of the designated FIC and an alternate.

C18.2.1.2 General information on the installation including name, type or function, location and address, charts of drainage patterns, designated water protection areas, maps showing locations of facilities described in C18.2.1.3, critical water resources, land uses, and possible migration pathways.

C18.2.1.3 An inventory of storage, handling, and transfer sites that could possibly produce a significant spill. For each listing, using maps as appropriate, include a prediction of the direction and rate of flow, and total quantity of POL or hazardous substance that might be spilled as a result of a major failure.

C18.2.1.4 An inventory of all POL and hazardous substances at storage, handling, and transfer facilities described in C18.2.1.3.

C18.2.1.5 Arrangements for Emergency Services. The plan will describe arrangements with installation and/or local police departments, fire departments, hospitals, contractors, and emergency response teams to coordinate emergency services.

C18.2.1.6 Means to Contact Emergency Services. The plan will include a telephone number or other means to contact the appropriate emergency services provider (e.g., installation fire department) on a 24-hour basis.

C18.2.1.7 A detailed description of the facility's prevention, control, and countermeasures (including structures and equipment for diversion and containment of spills) for each site listed in the inventory. Measures should permit, as far as practical, reclamation of spilled substances. Chapters governing hazardous materials, dangerous waste, POL (for example, above-ground storage tanks), underground storage tanks, pesticides, and PCBs provide specific criteria for containment structure requirements.

C18.2.1.8 A list of all emergency equipment (including but not limited to fire extinguishing systems, spill control equipment, communications and alarm systems [internal and external], personal protective equipment [PPE], and decontamination equipment) at each site listed in the inventory where this equipment is required. This list will be kept up-to-date. In addition, the plan will include the location and a physical description of each item on the list, and a brief outline of its capabilities.

C18.2.1.9 An evacuation plan for each site listed in the inventory, where there is a possibility that evacuation would be necessary. This plan will describe signal(s) to be used to begin evacuation, evacuation routes, alternate evacuation routes (in cases where the primary routes could be blocked by releases of dangerous waste or fires), and a designated meeting place.

C18.2.1.10 A description of deficiencies in spill prevention and control measures at each site listed in the inventory, to include corrective measures required, procedures to be followed to correct listed deficiencies, and any interim control measures in place. Corrective actions must be implemented within 24 months of the date of plan preparation or revision.

C18.2.1.11 Written procedures for:

- Operations to preclude spills of POL and hazardous substances
- Inspections
- Record-keeping requirements

C18.2.1.12 Site-specific procedures should be maintained at each site on the facility where significant spills could occur.

C18.2.2 Spill Control Section. The control section of the plan (which may be considered a contingency plan) will identify resources for cleaning up spills at installations and activities, and to provide assistance to other agencies when requested. At a minimum, this section will contain:

C18.2.2.1 Provisions specifying the responsibilities, duties, procedures, and resources to be used to contain and clean up spills.

C18.2.2.2 A description of immediate response actions that should be taken when a spill is first discovered.

C18.2.2.3 The responsibilities, composition, and training requirements of the FRT.

C18.2.2.4 Procedures for FRT alert and response to include provisions for:

- Access to a reliable communications system for timely notification of a POL spill or hazardous substance spill
- Public affairs involvement

C18.2.2.5 A current roster of the persons (and alternates) who must receive notice of a POL or hazardous substance spill, including a DESC representative if applicable. The roster will include name, organization mailing address, and work and home telephone numbers. Without compromising security, the plan will include provisions for the notification of the emergency coordinator after normal working hours.

C18.2.2.6 The plan will provide for the notification of the FIC, installation commander, and local authorities in the event of hazard to human health or environment.

C18.2.2.7 Assignment of responsibilities for making the necessary notifications, including notification to the emergency services providers.

C18.2.2.8 Surveillance procedures for early detection of POL and hazardous substance spills.

C18.2.2.9 A prioritized list of various critical water and natural resources that will be protected in the event of a spill.

C18.2.2.10 Other resources addressed in prearranged agreements that are available to the installation to clean up or reclaim a large spill due to DoD activities, if such a spill exceeds the response capability of the installation.

C18.2.2.11 Cleanup methods, including procedures and techniques used to identify, contain, disperse, reclaim, and remove POL and hazardous substances used in bulk quantity on the installation.

C18.2.2.12 Procedures for the proper reuse and disposal of recovered substances, contaminated POL, decontamination wastes, and absorbent materials, and procedures to be accomplished prior to resumption of operations.

C18.2.2.13 A description of general health, safety, and fire prevention precautions for spill cleanup actions.

C18.2.2.14 A public affairs section that describes the procedures, responsibilities, and methods for releasing information in the event of a spill.

C18.2.3 Reporting Section. The reporting section of the plan will address the following:

C18.2.3.1 Record-keeping when emergency procedures are invoked.

C18.2.3.2 Notification of spill responders when emergency procedures are invoked.

C18.2.3.3 The FIC will immediately notify the appropriate In-Theater Component Commander and/or Defense Agency, the Environmental Executive Agent, and the Italian Base Commander and submit a follow-up written report when:

C18.2.3.3.1 The spill occurs inside a DoD installation and cannot be contained within a berm or secondary containment.

C18.2.3.3.2 The FIC determines the spill meets the definition of "significant". A "significant spill" (as defined in this Chapter) is an uncontained release to the land or water in excess of any of the following quantities:

- For a dangerous waste or hazardous substance identified as a result of inclusion in Appendix A, any quantity in excess of the reportable quantity listed in Appendix A.
- For POL or liquid or semi-liquid hazardous material, hazardous substance, or dangerous waste, in excess of 400 liters (110 gallons)
- For other solid hazardous material, in excess of 225 kg (500 pounds)

- For combinations of POL and liquid, semi-liquid, and solid hazardous materials, hazardous substances, or dangerous wastes, in excess of 340 kg (750 pounds)

Note: If a spill is contained (inside an impervious berm, or on a nonporous surface, or inside a building), is not volatilized, and is cleaned up, the spill is not considered a significant spill.

C18.2.3.3.3 A water resource has been polluted.

C18.2.3.3.4 The FIC has determined that the spill is significant.

C18.2.3.4 When a significant spill occurs inside a DoD installation, the appropriate In-Theater Component Commander and/or Defense Agency, the Environmental Executive Agent, and Italian Base Commander will be notified immediately.

For spills that cannot be fully addressed during the initial response and that result in soil or groundwater contamination exceeding or likely to exceed the concentrations listed in Table 18.1, written notification to the Italian Base Commander must be made within 24 hours of the spill and must include the following information:

- The type of contaminant and quantity that was spilled
- The sequence of events that caused the spill
- The danger of causing pollution
- The anticipated impacts to soil, water, flora, or fauna
- The estimated size of population that could be at risk from the spill (if it is not possible to estimate this, some information on the urban characteristics must be submitted)

Within 48 hours after the first notification of a spill, written follow-up notification must be provided to the Italian Base Commander regarding the safety measures and emergency actions that were adopted after the spill to prevent further pollution and minimize risks.

The Italian Base Commander may submit the initial notification and follow-up notification to the following Italian authorities: Municipality, Province, and Region.

C18.2.3.5 If a significant spill occurs outside of a DoD installation, the person in charge at the scene will immediately notify the authorities listed in C18.2.3.4, and additionally will notify the local fire departments and obtain necessary assistance.

C18.3 TRAINING

Installations will provide and document necessary training and spill response drills to ensure the effectiveness of personnel and equipment. The training should include the following elements:

- FIC Notification Exercise
- Emergency Procedures Exercise
- Spill Management Team Tabletop Exercise
- Equipment Deployment Exercise

C18.4 FURTHER ACTIONS

After completion of the initial response, any remaining free product and/or obviously contaminated soil will be appropriately removed and managed. Further action will be coordinated and managed via the Component chain of command and the Italian Base Commander in accordance with this chapter, DODI 4715.8, and EUCOM Directive 80-2. If after the initial response contaminant levels exceed or are likely to exceed the levels in Table 18.1, the Installation shall consult with the Environmental Executive Agent via the Component chain of command and, in coordination with the Italian Base Commander, shall seek to engage the cognizant local or regional authority in a continuing dialogue to determine the appropriate cleanup response. The Installation shall develop a site characterization plan (C18.4.1) for submittal to the Italian Base Commander within 30 days after the spill event. Installations will carry out the site characterization after approval of the plan by the cognizant local or regional authority. Installations shall prepare for the development of a Preliminary Project Plan (C18.4.2) and a Final Project Plan (C18.4.3) and shall submit these plans according to a schedule coordinated with the Italian Base Commander and cognizant local or regional authority. The cleanup procedures of this section may only be applied to environmental contamination cause by spills for which spill response measures did not achieve the levels in Table 18.1. Preexisting environmental contamination, which may be commingled with or in the vicinity of contamination caused by the spill, caused by the past practices of the Department of Defense will be addressed in accordance with Department of Defense Instruction 4715.8 and EUCOM Directive 80-2.

C18.4.1 Site Characterization Plan. Generally, the site characterization plan will describe the spill site, including past and present activities; the location and extent of possible contamination; environmental characteristics at and influenced by the spill site; the necessary conditions for the protection of human health and the environment; and a plan to acquire sufficient information on the extent and character of the contamination.

The site characterization plan will be prepared in three sections (presentation of existing data, characterization of site and preliminary conceptual model, and plan of initial investigation) and will contain at least the following information:

- A summary report evaluating the data provided in the plan.
- A description of the contaminated media needing clean up, permanent safety measures, and/or environmental recovery.
- A detailed historical study describing the activities, production processes, and accidents that have occurred in the area and led to pollution of the site.
- Identification of the possible substances present, the areas most likely to be contaminated, and possible migrations routes.
- A description of the current and envisaged usage of the site.
- A description of completed and ongoing emergency actions such as removal of waste or dangerous substances and restriction of access to the site, and a description of the monitoring systems adopted to verify the effectiveness of the emergency actions.
- A detailed description of the site, the area possibly contaminated, and the migration pathways. The detailed description should included site geology and hydro-geology, surface water bodies, relevant environmental components, surrounding areas, and climate.
- A general characterization of the site and the preliminary presentation of the conceptual model, in particular the description of possible contaminant contribution from industrial activities both within and outside the site.
- Results of chemical, physical, or other testing performed.
- A preliminary description of the ultimate area of contamination.
- A description of the proposed geologic, hydro-geologic, or other research to be carried out to verify the site characterization and conceptual model.
- A detailed sampling and analysis plan.
- A description of additional safety measure to be implemented prior to cleanup.
- A discussion of the relationship or interaction of the proposed research with the surrounding environment, industrial activities, and/or processes in progress.
- A discussion describing how the proposed cleanup meets legal requirements.

The site characterization plan will be supported by maps and drawings of the site showing:

- The site and surrounding area (preferred scale of 1:5,000).
- The site showing past and present industrial activities, drains, storage locations, dumps, waste accumulation areas, etc. (preferred scale of 1:1,000).
- The extent of contamination.
- Results of chemical analyses (preferred scale 1:500 to 1:5,000).

- The hydrologic and hydro-geologic characteristics of the site (preferred scale 1:5,000).
- Wells and piezometers on the site (preferred scale 1:500 to 1:1,000) and in the area (preferred scale 1:5,000).
- Results of any geophysical or geological investigations.
- Proposed sampling points annotated to describe analyses (preferred scale 1:500 or 1:1,000).
- Schematic of emergency safety measures implemented or proposed.

C18.4.2 Preliminary Project Plan. This section is intended to provide the reader with an understanding of the scope and complexity of the preliminary project plan and is not a complete list of requirements. Consult the Environmental Executive Agent via the Component chain of command for more complete information. The preliminary project plan:

- Presents and evaluates the site characterization including an analysis of the contamination levels at the site
- Qualitatively defines the objectives of the clean up or the permanent safety measures given the explicit conditions of the site and surrounding area, with explicit reference to legal restraints and projected land use
- Analyzes potential clean up technologies and the corresponding achievable residual contamination levels
- Presents the risk analysis
- Analyzes and selects the best clean up technologies for the site
- If the clean up will not achieve the levels of Table 18.1, describes the safety measures proposed to protect human health.
- Describes tests necessary verify the effectiveness of the proposed clean up actions
- Fully describes the required work based on the technologies selected
- Fully describes the work and necessary conditions to achieve and guarantee permanent safety measures and instruments of control
- Describes the conduct of the environmental impact analysis, where proposed

The work proposed in the preliminary project will be sufficient to allow preliminary calculations of the engineering and other work required to achieve the clean up objectives. If the cognizant local or regional authority approves the presentation of project planning in phases, the preliminary project report will provide the above listed information for each phase for which a final project report will be presented.

C18.4.3 Final Project Plan. This section is intended to provide the reader with an understanding of the scope and complexity of the final project plan and is not a complete list of requirements. Consult the Environmental Executive Agent via the Component chain of command for more complete information. The final project plan will describe in full detail the work to be performed and the associated costs. The final project plan will include maintenance plans for the clean up work, permanent safety measures, security measures, and instruments of control. It also describes the engineering measures necessary to achieve the proposed actions. The final project plan will provide:

- A detailed description of selected technologies, engineering measures, and safety measures
- A project schedule and management plan
- Design of principal structures and plant.
- An engineering cost estimate.
- A description of measures to protect the health and safety of workers and the general population.
- A description of controls and measures to verify attainment of clean up objectives.
- Interventions to be carried out to achieve clean up objectives and site limitations
- Control plans describing procedures to operate, monitor, and maintain clean up actions and safety measures.

ADMINISTRATIVE ITEMS

1. Written notification of the Italian Base Commander must be made within 24 hours for spills that cannot be fully addressed during the emergency response and that result in soil or groundwater contamination exceeding the concentrations listed in Table 18.1. The notification must include the following information:

- The type of contaminant and quantity that was spilled
- The sequence of events that caused the spill
- The danger of causing pollution
- The anticipated impacts to soil, water, flora, or fauna
- The estimated size of population that could be at risk from the spill (if it is not possible to estimate this, some information on the urban characteristics must be submitted)

2. Within 48 hours of the first notification of a spill, written follow-up notification must be provided to the Italian Base Commander regarding the safety measures and emergency actions that were adopted after the spill to prevent further pollution and minimize risks.

The Italian Base Commander may submit the initial notification (Item 1) and follow-up notification (Item 2) to the following Italian authorities: Municipality, Province, and Region.

3. If after the initial response contaminant levels exceed or are likely to exceed the levels in Table 18.1, the Installation shall consult the Environmental Executive Agent via the Component chain of command and seek to engage the Italian Base Commander and the cognizant local or regional authority in a continuing dialogue to determine the appropriate cleanup response. The Installation shall develop a site characterization plan (C18.4.1) for submittal to the Italian Base Commander within 30 days after the spill event. Installations will carry out the site characterization after approval of the plan by the cognizant local or regional authority. Installations shall prepare for the development of a Preliminary Project Plan (C18.4.2) and a Final Project Plan (C18.4.3) and shall submit these plans according to a schedule coordinated with the Italian Base Commander and cognizant local or regional authority.

Table 18.1 Acceptable Contaminant Concentrations for Soil and Groundwater by Site Use

Parameter		Soil		Groundwater
		Recreation, Private, and Residential Use	Commercial and Industrial Use	
Units		(mg/kg)	(mg/kg)	(μ/L)
Metals				
Aluminum		NA	NA	200
Antimony		10	30	5
Arsenic		20	50	10
Beryllium		2	10	4
Cadmium		2	15	5
Chromium (Total)		150	800	50
Chromium VI		2	15	5
Cobalt		20	250	50
Copper		120	600	1,000
Iron		NA	NA	200
Lead		100	1,000	10
Manganese		NA	NA	50
Mercury		1	5	1
Nickel		120	500	20
Selenium		3	15	10
Silver		NA	NA	10
Thallium		1	10	2
Tin		1	350	NA
Vanadium		90	250	NA
Zinc		150	1,500	3,000
Inorganic Compounds				
Boron		NA	NA	1,000
Cyanides (Total)		1	100	50
Fluorides		100	2,000	100
Nitrites		NA	NA	500
Sulfates		NA	NA	250,000
Organic Aromatic Compounds				
A	Benzene	0.1	2	1
B	Ethylbenzene	0.5	50	50
C	Styrene	0.5	50	25
D	Toluene	0.5	50	15
E	para-Xylene	0.5	50	10
	Sum of Aromatic Compounds B-E	1	100	NA
Polycyclic Aromatic Compounds [1]				
F	Benzo(a)anthracene	0.5	10	0.1
G	Benzo(a)pyrene	0.1	10	0.01
H	Benzo(b)fluoranthene	0.5	10	0.1
I	Benzo(k)fluoranthene	0.5	10	0.05
J	Benzo(g,h,i)perylene	0.1	10	0.01
K	Chrysene	5	50	5
L	Dibenzo(a)pyrene	0.1	10	NA

Parameter		Soil		Groundwater
		Recreation, Private, and Residential Use	Commercial and Industrial Use	
Units		(mg/kg)	(mg/kg)	(μ/L)
M	Dibenzo(a,h)anthracene	0.1	10	0.01
N	Indeno(1,2,3-c,d)pyrene	0.1	5	0.1
O	Pyrene	5	50	50
	Sum of Polycyclic Aromatic Compounds F-O	10	100	NA
	Sum of Polycyclic Aromatics Compounds H, I, J, and N	NA	NA	0.1
Carcinogenic Aliphatic Chlorinated Compounds [1]				
Chloromethane		0.1	5	1.5
1,2-Dichloroethane		0.2	5	3
1,1-Dichloroethylene		0.1	1	0.05
Dichloromethane		0.1	5	NA
1,2-Dichloropropane		0.3	5	0.15
Esachlorobutadiene		NA	NA	0.15
1,1,2,2-Tetrachloroethane		0.5	10	0.05
Tetrachloroethylene (PCE)		0.5	20	1.1
1,1,2-Trichloroethane		0.5	15	0.2
Trichloroethylene		1	10	1.5
Trichloromethane		0.1	5	0.15
1,2,3-Trichloropropane		0.1	1	0.001
Vinyl Chloride		0.01	0.1	0.5
Sum of Organohalogenated Compounds		NA	NA	10
Non-Carcinogenic Aliphatic Chlorinated Compounds				
1,1-Dichloroethane		0.5	30	810
1,2-Dichloroethylene		0.3	15	60
1,1,1-Trichloroethane		0.5	50	NA
Carcinogenic Aliphatic Halogenated Compounds				
Bromodichloromethane		0.5	10	0.17
Bromoform		0.5	10	0.3
Dibromochloromethane		0.5	10	0.13
1,2-Dibromoethane		0.01	0.1	0.001
Nitrobenzene Compounds				
Chloronitrobenzenes (each)		0.1	10	0.5
1,2-Dinitrobenzene		0.1	25	15
1,3-Dinitrobenzene		0.1	25	3.7
Nitrobenzene		0.5	30	3.5
Chlorobenzene Compounds				
1,2-Dichlorobenzene		1	50	270
1,4-Dichlorobenzene		0.1	10	0.5
Esachlorobenzene		0.05	5	0.01
Monochlorobenzene		0.5	50	40
Pentachlorobenzene		0.1	50	5
1,2,4,5-Tetrachlorobenzene		1	25	1.8

Parameter	Soil		Groundwater
	Recreation, Private, and Residential Use	Commercial and Industrial Use	
Units	(mg/kg)	(mg/kg)	(μ/L)
1,2,4-Trichlorobenzene	1	50	190
Non-Chlorinated Phenols [1]			
Methylphenol (o-,m-,p-)	0.1	25	NA
Phenol	1	60	NA
Phenols and Chlorinated Phenols			
2-Chlorophenol	0.5	25	180
2,4-Dichlorophenol	0.5	50	110
Pentachlorophenol	0.01	5	0.5
2,4,6-Trichlorophenol	0.01	5	5
Aromatic Amines			
Aniline	0.05	5	10
Diphenylamine	0.1	10	910
p-Toluidine	0.1	5	0.35
m-Anisidine	0.1	10	NA
p-Anisidine	0.1	10	NA
Sum of Aromatic Amines (73-77)	0.5	25	NA
Pesticides			
Alachlor	0.01	1	0.1
Aldrin	0.01	0.1	0.03
Atrazine	0.01	1	0.3
Chlordane	0.01	0.1	0.1
DDD, DDT, DDE	0.01	0.1	0.1
Dieldrin	0.01	0.1	0.03
Endrin	0.01	2	0.1
α-Lindane	0.01	0.1	0.1
β-Lindane	0.01	0.5	0.1
γ-Lindane	0.01	0.5	0.1
Sum of Pesticides	NA	NA	0.5
Dioxins and Furans			
PCBs	0.001	5	0.01
Sum of PCDD and PCDF (TEF conversion)	1×10^{-5}	1×10^{-4}	4×10^{-6}
Hydrocarbons			
C<12	10	250	NA
C>12	50	750	NA
Other Compounds			
Asbestos (Fibers A > 10 mm)	1,000*	1,000*	TBD*
Acrylamide	NA	NA	0.1
n-Hexane	NA	NA	350
para-Phthalic Acid	NA	NA	37,000
Phthalic Acid Ester (each)	10	60	NA

Notes:

* Corresponding to the analytical method detection limit.

1 The table includes compounds that are frequently encountered at contaminated sites. For those compounds not specifically included in this table, the maximum concentration limits are derived by comparison with the compound more similar toxicologically.

TBD* To be determined. The only available data indicate a value of 0.7 million fibers/L. This value has been recognized by both the Italian National Environmental Protection Agency (ANPA) and the Italian Superior Institute of Health (ISS) as being too high. The new value will be established by ANPA in coordination with the Regions.

SCOPE & DEFINITIONS

This Chapter contains criteria to control and abate pollution resulting from POL products and hazardous materials stored in underground storage tanks (USTs). Standards for USTs containing dangerous wastes are covered in Chapter 6.

Azienda Regionale Protezione Ambiente (ARPA) – The Italian Regional Agency for Environmental Protection. These are the Regional offices of the National Agency for Environmental Protection (ANPA), which is the technical department of the Italian Environmental Ministry.

Hazardous Material – Any material defined as a hazardous material in Chapter 5. The term does not include:

- Petroleum, including crude POL or any fraction thereof, that is not otherwise specifically listed or designated as a hazardous material above
- Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)

POL – Refined petroleum, oils, and lubricants.

Tank Tightness Testing – A test which must be capable of detecting a 0.38 liter (0.1 gallon) per hour leak from any portion of the tank that routinely contains product while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the location of the water table.

Underground Storage Tank (UST) – Any tank including underground piping connected thereto, larger than 416 liters (110 gallons), that is used to contain POL products or hazardous material and the volume of which, including the volume of connected pipes, is 10% or more beneath the surface of the ground, but does not include:

- Tanks with a capacity of less than 15,000 liters (3,963 gallons) containing heating oil used for consumption on the premises where it is stored
- Septic tanks
- Stormwater or wastewater collection systems
- Flow through process tanks
- Surface impoundments, pits, ponds, or lagoons
- Field constructed tanks
- Hydrant fueling systems

- Storage tanks located in an accessible underground area (such as a basement or accessible vault) if the storage tank is situated upon or above the surface of the floor
- USTs containing de minimus concentrations of regulated substances, except where C19.3.3 is applicable
- Emergency spill or overflow containment UST systems that are expeditiously emptied after use

New UST – Any UST installed on or after 1 October 1994.

Hazardous Material UST – An UST that contains a hazardous material (but not including dangerous waste as defined in Chapter 6) or any mixture of such hazardous materials, and petroleum, and which is not a petroleum UST.

CRITERIA

C19.1 RECORD-KEEPING

All installations will maintain an UST inventory.

All installations must maintain an UST log book whose entries must include the following information for each UST:

- Year of installation of the UST
- Date of each periodic function/control test
- Date of each tightness test
- Any modification to the UST
- Any anomaly or accident involving the UST

All USTs (excluding aircraft fuel USTs on military airfields) must be reported to the Italian Base Commander (who may transmit the information to the ARPA; see Chapter 1 for the process). Changes in the UST status must also be reported to the Italian Base Commander.

C19.2 NEW POL USTS

All new petroleum UST systems will be properly installed, protected from corrosion, provided with spill/overfill prevention, and will incorporate leak detection as described below. New USTs will either be double-walled or have a secondary containment vault. The UST and the associated equipment must be checked and certified as operational by the company installing the system.

C19.2.1. Corrosion Protection. New tanks and piping must be provided with corrosion protection unless constructed of fiberglass or other non-corrodible materials.

New double-walled USTs (excluding aircraft fuel USTs on military airfields) must have UST walls constructed of one of the following:

- Both metallic, with the external surface coated with an anti-corrosion layer
- Metallic internal surface and non-metallic external surface
- Both non-metallic, if the wall material is both resistant to corrosion and to mechanical stress
- Non-metallic internal surface and anti-corrosion-coated metallic external surface

Single-walled USTs are permitted if placed in a containment vault that has been coated with an impermeable material and equipped with continuous leak monitoring. The same vault may hold more than one UST without partitioning.

C19.2.2 Spill/Overflow Protection. New USTs will be provided with spill and overfill prevention equipment, except where transfers are made in the amounts of 95 liters (25 gallons) or less. Where spill and over-fill protection are required, a spill containment box must be installed around the fill pipe. Overfill prevention will be provided by one of the following methods:

- Automatic shut-off device (set at 95% of tank capacity)
- High level alarm (set at 90% of tank capacity)

C19.2.3 Leak Detection. Leak detection systems must be capable of detecting a 0.38 liter/hour (0.1 gallon/hour) leak rate or a release of 568 liters (150 gallons) (or 1% of the tank volume, whichever is greater) within 30 days with a probability of detection of 0.95 and a probability of false alarm of not more than 0.05.

- New USTs must be equipped with interstitial monitoring for leak detection.
- All new pressurized UST piping must be equipped with automatic line leak detectors and utilize either an annual tightness test or monthly monitoring. In addition, all pressurized piping (excluding aircraft fuel USTs at military airfields) must be installed with a "sleeve" or equivalent system to collect leaks/spills.
- Suction piping will either have a line tightness test conducted every 3 years or use monthly monitoring.

C19.3 EXISTING POL USTs

Existing USTs and piping will be properly closed if not needed or will be upgraded or replaced to meet the new UST system requirements in C19.2 by 13 August 2004.

C19.3.1 Existing USTs and piping not incorporating leak detection will be tightness tested annually (in accordance with recognized U.S. or comparable Italian industry standards) and inventoried monthly to determine system tightness, until the date of the required UST replacement/upgrade (above). Tightness testing must be conducted by qualified personnel (i.e., personnel who can demonstrate that they possess appropriate expertise in that field). The test results must be logged into the UST log book.

C19.3.2 All existing leaking USTs will be immediately removed from service. If the UST is still required, it will be repaired or replaced. If the UST is no longer required it will be removed from the ground. When a leaking UST is removed, exposed free product and/or obviously contaminated soil in the immediate vicinity of the tank will be appropriately removed and managed. Installations will make any required notifications in accordance with C18.2.3. Additional action will be governed by DoDI 4715.8 (Environmental Remediation for DOD Activities Overseas) and EUCOM 80-2 (Environmental Executive Agent Remediation Policy). Under extenuating circumstances (e.g., where the UST is located under a building), the UST will be cleaned and filled with an inert substance, and left in place.

C19.3.3 When a UST has not been used for 1 year, all of the product and sludges must be removed. Subsequently, the tank must be either cleaned and filled with an inert substance, or removed. Tank wastes must be tested in accordance with C9.3.

C19.4 NEW HAZARDOUS MATERIAL USTs

C19.4.1 All new hazardous material USTs and piping must meet the same design and construction standards as required for new petroleum USTs and piping, and in addition must be provided with secondary containment for both tank and piping. Secondary containment can be met by using double-walled tanks and piping, liners, or vaults.

C19.4.2 Leak Detection. The interstitial space (space between the primary and secondary containment) for tanks and piping must be monitored monthly for liquids or vapors following the requirements of C19.2.3.

C19.5 EXISTING HAZARDOUS MATERIAL USTs

C19.5.1 Existing hazardous material tanks and piping will be upgraded or replaced to meet the new hazardous material tanks and piping requirements indicated in C19.4.

C19.5.2 Existing tanks and piping not incorporating leak detection will be tightness tested annually and inventoried monthly.

C19.6 MAXIMUM STORAGE VOLUME OF NEW USTS

The maximum storage capacity of new USTs (excluding aircraft fuel USTs at military airfields) is limited to:

- 50,000 liters (13,227 gallons) for USTs containing any flammable substances at any gas stations
- 100,000 liters (26,455 gallons) for USTs containing liquid hazardous materials classified as very toxic or toxic (defined in Chapter 5), but not flammable

C19.7 IDENTIFICATION TAGS FOR NEW USTS

New USTs (excluding aircraft fuel USTs at military airfields) must have an identification tag with the following information:

- Name and address of the UST manufacturer
- Year of construction
- Storage capacity, wall thickness, and construction material(s)
- UST operating pressure and operating pressure of the interstitial space

C19.8 MINIMUM DISTANCE FOR USTS FROM DRINKING WATER SUPPLY WELLS

USTs for POL and/or hazardous materials must be at least 200 meters from any drinking water supply well.

ADMINISTRATIVE ITEMS

1. All USTs (excluding aircraft fuel USTs on military airfields) must be reported to the Italian Base Commander, who may transmit the information to the ARPA.

2. Changes in UST status must also be reported to the Italian Base Commander, who may transmit the information to the ARPA.

SCOPE & DEFINITIONS

This Chapter contains criteria to control and abate pollution resulting from the storage, transport, and distribution of petroleum products. Criteria for Underground Storage Tanks (USTs) containing POL products are addressed in Chapter 19.

Bulk Storage Tanks – Refers to field-constructed tanks, usually having a capacity greater than 190,000 liters (50,000 gallons), and constructed above or below ground.

Pipeline Facility – Includes new and existing pipes, pipeline rights of way, auxiliary equipment (e.g., valves, manifolds, etc.), and buildings or other facilities used in the transportation of POL.

POL – Refined petroleum, oils, and lubricants.

POL Storage or Transfer Facilities – Any individual above-ground tank of 2,500 liters (660 gallons) or greater; aggregate above-ground storage of 5,000 liters (1,320 gallons) or greater; UST storage of greater than 159,000 liters (42,000 gallons); or a pipeline facility.

Storage Tank – A fixed container designed to store POL.

Underground Storage Tank (UST) – Any tank including underground piping connected thereto, larger than 416 liters (110 gallons), that is used to contain POL products or hazardous materials and the volume of which (including the volume of connected pipes) is 10% or more beneath the surface of the ground, but does not include:

- Tanks with a capacity of less than 15,000 liters (3,963 gallons) containing heating oil used for consumption on the premises where it is stored
- Septic tanks
- Stormwater or wastewater collection systems
- Flow through process tanks
- Surface impoundments, pits, ponds, or lagoons
- Hydrant fueling systems
- UST containing "*de minimus*" concentrations of regulated substances
- Emergency spill or overflow containment UST systems that are expeditiously emptied after use
- Storage tanks located in an accessible underground area (such as a basement or accessible vault) if the storage tank is situated upon or above the surface of the floor

CRITERIA

C9.1 SPILL PLANS

Each installation will have a contingency plan to manage spills and releases at all POL storage and transfer facilities. Criteria for these plans are found in Chapter 18 of this document. These plans

must be written specifically for each POL facility, certified by a competent technical authority, and updated at least every 5 years or when there are significant changes to facilities or operations.

C9.2 GENERAL PROVISIONS

All POL above-ground bulk storage tanks must meet the following requirements:

C9.2.1 All above-ground bulk POL storage tanks must be provided with a secondary means of containment (dike and basin). Each containment system must meet the larger of the following volumes:

- Equal to the volume of the largest AST plus sufficient freeboard to allow for precipitation and expansion of product
- Equal to one-third of the total capacity stored in the ASTs in the containment system

C9.2.2 Maximum permeability for containment areas will be 10^{-7} cm/sec.

C9.2.3 Drainage of stormwaters from containment areas will be controlled by a valve that is locked closed when not in active use.

C9.2.4 Before draining stormwaters from containment areas, they will be inspected for petroleum sheen. If a petroleum sheen is present it must be collected with adsorbent material prior to drainage, or treated using an oil-water separator. Disposal of adsorbent material exhibiting the hazardous characteristics in Table 5.1 will be in accordance with Chapter 6 of this document.

C9.3 TANK WASTES PROVISIONS

POL tank cleaning wastes frequently have hazardous characteristics (as defined in Table 5.1) and must be handled and disposed of according to the requirements of Chapter 6 of this document. These wastes and handling procedures include:

C9.3.1 Tank cleaning wastes (sludge and washwaters) will be disposed of in accordance with the criteria of Chapter 6 of this document, unless testing confirms they do not have hazardous characteristics as defined in Table 5.1.

C9.3.2 Tank bottom waters (which are periodically drained from bulk storage tanks) will be collected and disposed of in accordance with Chapter 6 of this document, unless testing confirms they do not have hazardous characteristics.

C9.4 GENERAL POL PIPELINE PROVISIONS FOR TESTING AND MAINTENANCE

All pipeline facilities carrying POL must be tested and maintained in accordance with recognized U.S. or European industry standards. This includes these requirements:

C9.4.1 Each pipeline operator handling POL will prepare and follow a procedural manual for operations, maintenance, and emergencies.

C9.4.2 Each new pipeline facility and each facility in which pipe has been replaced or relocated must be tested in accordance with recognized U.S. or European industry standards, without leakage before being placed in-service.

C9.5 GENERAL POL PIPELINE CONSTRUCTION

All pipeline facilities with a construction start date after 1 October 1994 will be designed and constructed to meet recognized U.S. or European industry standards.

C9.6 POL SPILLS & LEAKS

To control accidental POL releases, the installation must follow the guidance in the spill plan required under C18.2.2 in Chapter 18.

C9.7 INVENTORY OF POL STORAGE FACILITIES

An updated inventory of POL storage facilities shall be submitted to the Italian Base Commander every 6 months. The Italian Base Commander may transmit the inventory to the Italian Ministry of the Industry (see Chapter 1 for the process). The inventory shall include a listing of each POL storage unit (ASTs, USTs, and packaged POL products stored at quantities of 2 meters^3 [528 gallons] or greater at an individual location) and the capacity and content of that unit.

ADMINISTRATIVE ITEMS

1. An updated inventory of POL storage facilities shall be submitted every 6 months to the Italian Base Commander, who may transmit the inventory to the Italian Ministry of the Industry (see Chapter 1 for the process). The inventory shall include a listing of each POL storage unit (ASTs, USTs, and packaged POL products stored at quantities of 2 meters^3 [528 gallons] or greater at an individual location) and the capacity and content of that unit.

APPENDIX B

OPNAVINST 5090 - Chapters 9, 10, 12, 16, & 18

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CHAPTER 9

OIL MANAGEMENT ASHORE

9-1 Scope

9-1.1 This chapter identifies requirements and responsibilities applicable to the prevention of oil pollution and the collection, reclamation, and disposal of oily wastes and used oils ashore. Requirements apply in all areas within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands. Chapter 18 provides Navy policy with respect to activities in foreign countries.

9-1.2 Chapter 10 describes the Navy response to oil spills under the National Contingency Plan (NCP). Chapter 12 describes the management of petroleum products, residues, or other mixtures that meet the reference (a) definition of hazardous waste (HW). Chapter 16 describes Management of storage tanks. Chapter 19 addresses shipboard oil pollution abatement.

9-1.3 References.

a. 40 CFR 260-266, Hazardous Waste Management System

b. 40 CFR 110, Discharge of Oil

c. 40 CFR 279, Standards for the Management of Used Oil

d. 40 CFR 270, Standards for Used Oil Processors and Refiners

e. 33 CFR 154, Oil Pollution Prevention Regulations for Marine Oil Transfer Facilities

f. 40 CFR 112, Oil Pollution Prevention

g. 49 CFR 110, Hazardous Materials Public Sector Training and Planning Grants

h. 49 CFR 171 (Subchapter C), Hazardous Materials Regulations

i. 49 CFR 174, Carriage by Rail

j. 49 CFR 176, Carriage by Vessel

k. NFESC 7-03, Oil Spill Prevention Control and Countermeasures Planning Manual (NOTAL).

9-2 Legislation

9-2.1 Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (CWA). Requires Federal activity compliance with applicable requirements concerning the control of oil pollution. Prohibits the discharge of oil into any surface waters of the U.S., if the discharge violates applicable water quality standards or effluent standards or causes a sheen on, or film upon, or discoloration of the surface of the water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of the water, or upon the shoreline.

9-2.2 Military Construction Codification Act, Section 6. Contains a provision that allows net proceeds from the sale of recyclable materials (including used oil) to be used by Navy activities for certain purposes.

9-2.3 Oil Pollution Act of 1990 (OPA 90). Amends Section 311 of the CWA to clarify Federal response authority, increase penalties for spills, establish United States Coast Guard (USCG) response organizations, require tank vessel and facility response plans, and provide for contingency planning in designated areas. The

OPA 90 provides new contingency planning requirements for both government and industry and establishes new construction, manning, and licensing requirements for tank vessels. The OPA 90 also increases penalties for regulatory noncompliance, broadens the response and enforcement authorities of the Federal government, and preserves State authority to establish laws governing oil spill prevention, response, and periodic drills and exercises.

9-3 Terms and Definitions

9-3.1 Boiler. An enclosed device using controlled flame combustion and having the following characteristics:

a. The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

b. The unit's combustion chamber and primary energy recovery section(s) is of integral design, i.e., the combustion chamber and primary energy recovery section(s) is physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed. However, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section(s). The following units are not precluded from being boilers: process heaters (units that directly transfer energy to a process stream), and fluidized bed combustion units; and

c. While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

d. The unit must export and use at least 75 percent of the recovered energy calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (For example, preheating fuel or combustion air, driving induced or forced draft fans or feeding water pumps); or

e. The unit is one that the Environmental Protection Agency (EPA) Regional Administrator has determined on a case-by-case basis, to be a boiler, after considering the standards in reference (a), Subpart C, Part 260.32, Variances To Be Classified As A Boiler.

9-3.2 Bulk-oil Tank. Any permanent, stationary container designed to store an accumulation of, or process oil that is constructed of non-earthen materials that provide structural support.

9-3.3 Industrial Furnace. Any of the following enclosed devices that are integral components of manufacturing processes and use controlled flame devices to accomplish recovery of materials or energy:

a. Cement kilns

b. Lime kilns

c. Aggregate kilns

d. Phosphate kilns

e. Coke ovens

f. Blast furnaces

g. Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces)

h. Titanium dioxide chloride process oxidation reactors

i. Methane reforming furnaces

j. Pulping liquor recovery furnaces

k. Combustion devices used in the recovery of sulfur values from spent sulfuric acid

l. Such other devices as the EPA Administrator may, after notice and comment, add to this list on the basis of one or more of the factors described in reference (a), Subpart B, Part 260.10.

9-3.4 Lubricating (Lube) Oil. Crankcase oil, cutting oil, gear lubricant, metalworking lubricant, hydraulic oil, and transmission fluid.

9-3.5 Navigable Waters. As defined in reference (b), Section 110.1, *"Navigable Waters"* means the waters of the United States, including the territorial seas. The term includes:

a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.

b. Interstate waters, including interstate wetlands.

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes.

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

(3) That are used or could be used for industrial purposes by industries in interstate commerce.

d. All impoundments of waters otherwise defined as navigable waters under this section.

e. Tributaries of waters identified in paragraphs a-d of this section, including adjacent wetlands.

f. Wetlands adjacent to waters identified in paragraphs a-e of this section: Provided, "That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States..."

9-3.6 Off Specification Used Oil. Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that exceed the specified limits set in Table 1, reference (c).

9-3.7 Oil. As defined by OPA 90, Section 1001, "oil" means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, that is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act.

NOTE:

This definition includes vegetable oil.

9-3.8 On Specification Used Oil. Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that do not exceed the specified limits set in Table 1, reference (c).

9-3.9 Processing. Any chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to:

blending used oil with virgin petroleum products, blending used oil to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.

9-3.10 Reclaimed. A material is reclaimed if it is processed to recover a usable product, or if it is regenerated.

9-3.11 Recycled. A material is recycled if it is used, reused, or reclaimed.

9-3.12 Transportation or Non-Transportation Related Oil Storage Facilities. Shore activities with oil storage facilities are classified as either transportation-related or non-transportation-related. Transportation-related facilities are primarily involved with bulk oil transfer. Bulk oil transfer includes transferring oil from stationary storage tanks to tanker ships, highway tankers, and railroad tank cars for transport to off-site locations. Non-transportation-related facilities are primarily involved in fuel storage for on site use.

9-3.13 Used Oil. Any oil that has been refined from crude oil, or any synthetic oil, that has been used and because of such use is contaminated by physical or chemical impurities.

9-3.14 Used Oil Generator. Any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.

9-3.15 Used Oil Management Plan. A document that identifies sources of used oils, primary used oil segregation groups, recycling options, and detailed operational requirements for a specific Navy facility or facilities. (May be incorporated into or referenced in installation Hazardous Material Management Plan, or Pollution Prevention Plan.)

9-3.16 Used Oil Processor. A facility that processes used oil.

9-3.17 Used Oil Transfer Facility. Any transportation-related facility including loading docks, parking areas, storage areas and other areas where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation, or prior to an activity performed under reference (c), Section 279.20(b)(2). Transfer facilities that store used oil for more than 35 days are subject to regulation under reference (d).

9-3.18 Used Oil Transporter. Any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but do not produce (or make more amenable for production) used oil derived products or used oil fuel.

9-4 Requirements

9-4.1 Oil Storage Facilities. Transportation-related facilities serving vessels are subject to current USCG regulations. Through reference (e), the USCG requires facility operation manuals for applicable marine transportation-related facilities. These regulations, which apply to all components of DOD, address aspects of the design and operation of on-shore and offshore facilities that are engaged in the transfer of bulk oil to and from vessels.

EPA, through reference (f), requires spill prevention plans for applicable onshore non-transportation-related facilities.

The Research and Special Programs Administration (RSPA), under reference (g) requires response plans for onshore transportation-

related facilities, namely pipelines and tank trucks that leave naval facilities. See 10-4.1.

9-4.2 Spill Prevention Control and Countermeasure (SPCC) Plans

9-4.2.1 Facilities that are not transportation-related will have a SPCC Plan that provides a history of oil spill events, the potential for discharge of oil, as well as containment procedures and equipment to prevent oil spills into or upon a navigable waterway or shoreline of the U.S. A registered professional engineer (PE) in the State of jurisdiction must initially certify the SPCC plans, and the facility must review and evaluate them. Based on the review and evaluation, facilities will amend SPCC plans within 6 months of the review. Facilities must update their SPCC plans on a triennial basis and a PE must sign them.

9-4.2.2 SPCC plans are not required if the facility has an aggregate unburied storage capacity of 1,320 gallons or less of oil (provided no single container capacity exceeds 660 gallons), has a total underground storage capacity of 42,000 gallons or less, or could not reasonably be expected to discharge oil into or upon the navigable waters of the U.S. or adjoining shorelines because of facility location. Facilities that have experienced a spill into navigable waters of 1,000 gallons, or two reportable spills into navigable waters in any 12-month period, are required to submit SPCC plans to the EPA Regional Administrator under reference (f) within 60 days following such a spill.

9-4.2.3 New shore activities will prepare SPCC plans within 6 months of first operation and implement SPCC plans no later than 1 year after beginning operations. They will review SPCC plans and implement them within 6 months of a change in facility design, operation or maintenance, or the construction, completion and acceptance of a new facility that materially affects the facility's potential for the discharge of oil to navigable waters or adjoining shoreline.

9-4.2.4 Facilities will maintain SPCC plans at the facility and keep them available to EPA Regional Administrators or their designated representatives, and State and local agencies for on-site review during normal working hours.

9-4.3 Used Oil Recycling. DOD policy memoranda direct military departments to maximize the segregation, recycling and reuse of used oils, and to comply with Resource Conservation and Recovery Act (RCRA) regulations.

9-4.4 Used Oil Fuels Burned for Energy Recovery

9-4.4.1 Facilities burning used oil for energy recovery must test it. Used oil is subject to regulation under reference (c) unless the constituents and properties of the used oil do not exceed the allowable limits specified in Part 279.11. Used oil that does not have constituents and properties that exceed specification, i.e., the allowable limits set by Table 1 in Part 279.11, is not regulated under Part 279. However, the specification standard does not apply to mixtures of used oil and HW still regulated as HW according to Part 279. Also, used oil containing more that 1,000 parts per million total halogens is presumed to be a HW under Part 279.10(b)(1) unless it can be shown that the used oil does not contain HW using acceptable analytical methods.

9-4.4.2 Included in Part 279 are standards for used oil generators, transporters, transfer facilities, processors, marketers, and burners burning off-specification used oil for energy recovery. Part 279 also contains specific spill prevention and contingency-planning requirements for used oil storage, transfer and processing facilities.

9-4.4.3 Used oil that is mixed with a HW or HWs identified as such under reference (a), Subpart C, Characteristics of Hazardous Waste or under Subpart D, Lists of Hazardous Wastes, is subject to regulation as a HW (under reference (a)) if the

mixture exhibits any characteristics of HW as identified in Subpart C. Reference (c) prescribes specific provisions as to the applicability of the RCRA regulations to the management and use of used oil. Burning used oil that is a HW solely because it exhibits a characteristic of HW is subject to standards set forth in reference (c). The management and use of used oil, whether or not the used oil exhibits any characteristics of a HW, are regulated under reference (c).

9-4.4.4 Synthetic oils, fluids, and lubricants must be segregated from the crude-oil-derived used oil.

9-4.4.5 EPA must be notified by persons marketing or burning HW fuel, specification used oil fuel and off-specification used oil fuel. The sale of regulated fuels by the Defense Reutilization and Marketing Office (DRMO) is marketing; the transfer of regulated fuels between the various DOD components and activities are not.

9-4.5 Prohibited Uses of Used Oil. Used oils will not be used for environmentally unacceptable purposes such as weed control, insect control, road surfacing, dust control, or open pit burning.

A) **9-5 Navy Policy.** Navy shore facilities and Navy ships routinely manage oily wastes and waste oil. This chapter primarily addresses policy related to shore facilities. Chapter 19 contains policy for ships.

9-5.1 Navy Shore Facilities OPA 90 Compliance. Naval facilities shall use reference (f) for developing non-transportation-related facility response plans. Marine transportation-related facilities shall use reference (e) to develop response plans. All facilities shall use references (h), (i) and (j) to develop response plans for off-base transportation pipelines and bulk packaging. Normally a facility shall develop one response plan to address the requirements of all applicable response planning requirements, since most naval facilities are "complex" facilities under the OPA 90 regulations. The SPCC plan shall be a separate document. See chapter 10 for specific details on developing facility response plans.

9-5.2 Oil Storage Facilities. Navy policy is to meet USCG and EPA oil pollution prevention regulations pertaining to transportation-related and non-transportation-related facilities and to exceed those regulations wherever practicable.

9-5.3 Used Oil Recycling. Oil shall be recycled and reused within the Navy whenever technically and environmentally feasible and when environmentally acceptable. Navy policy is to recycle used oil per Federal, State and local regulations.

9-5.3.1 Military personnel and civilian employees shall be encouraged to collect used lube (crankcase) oil from personal vehicles for recycling via Navy installation, local, or regional used oil recycling programs.

9-5.3.2 If recycling of used lube oil is not feasible for economic reasons, the lube oil may be burned as a fuel or fuel supplement, provided appropriate chemical and economic analyses are made to determine suitability of burning as well as compliance with air pollution control requirements (chapter 5) and HW regulations (chapter 12).

9-5.3.3 When allowed by military used oil specifications, large installations or complexes shall consider closed loop used lube oil re-refining by commercial re-refiners.

9-5.3.4 Net proceeds from the sale of used oil shall be used by a Navy generating installation that has a qualified recycling program (QRP) for certain purposes as specified in chapter 14.

9-5.4 SPCC plans shall be developed as described in paragraph 9-4.2 and shall be prepared per Federal, State, and local requirements.

9-5.5 Oily Waste/Waste Oil (OW/WO) Management Plans. (A The cost and potential

environmental compliance problems associated with oily waste/waste oil (OW/WO) management both ashore and afloat necessitate a comprehensive approach that maximizes opportunities for recovery and recycling of usable product on a cost effective basis, provides necessary support to ships and submarines with varying capacities to retain or otherwise manage oily waste, and considers circumstances unique to specific ports, including the State and local regulatory climate. To balance these considerations correctly, facilities shall implement the following planning procedures:

A) **9-5.5.1 Oily Waste/Waste Oil Management Plan General Requirements.** Shore Facilities that manage oil products or waste products shall develop OW/WO Management Plans as follows:

a. The complexity and content of the OW/WO Management Plan will depend on the individual homeport or Navy activities grouped within a region. Factors affecting the management of OW/WO at individual port activities include, but are not limited to, the local environmental regulatory requirements, local water quality, the availability of shoreside infrastructure and resources, assigned ship classes and time in port, and bilgewater and other OW/WO generation rates.

b. OW/WO Management Plans shall include activity-specific policies for collecting, treating, and disposing of bilgewater from naval vessels and other shipboard and shoreside oily wastes. Facilities shall make this plan consistent with the policy set forth in section 19-5. It shall address the management of shipboard OW/WO from ships where oil water separators (OWSs) and oil content monitors (OCMs) are either not installed or installed, but not operational

c. Each plan shall include an evaluation of the problems specific to the naval activity or region. The plan shall include a review and summary of the site-specific regulatory requirements for the collection, treatment, transfer, and disposal of bilgewater and other OW/WO as well as the requirements for the use of reclaimed oil. It shall provide an inventory of existing OW/WO generating sources and treatment facilities that documents current generation rates and available resources for handling OW/WO.

Using this inventory, as well as the estimated future generation of OW/WO at the activity, the plan shall identify feasible alternatives for the collection, storage, treatment, and transfer of OW/WO. Alternatives may include various combinations of collection (waste oil barges, pier riser systems, pumping stations), storage (tankage, barges) treatment (package treatment units, commercial or Navy-owned oily waste treatment facilities, commercial hauler), and transfer (truck or rail car, pipelines). Plans shall discuss the unique regulatory situation affecting bilgewater and other OW/WO management in each area and justify the validity of each alternative considered. Activities shall conduct an economic analysis of the proposed alternatives that considers life-cycle costs for not less than 25 years.

The plan shall provide a plan of action with milestones for implementation of the recommended alternatives, including the appropriate project documentation for any project actions required under the recommended alternatives. For proposed military construction projects, facilities shall use the economic justification required by Commander Naval Facilities Engineering Command (COMNAVFACENGCOM) Economic Analysis Handbook, P-442, (NOTAL) as a basis for all economic comparisons. OW/WO Management Plans shall discuss procedures for plan implementation, addressing all facilities, equipment, personnel, and procedures indicated by the most feasible alternative.

d. OW/WO Management Plans have no established format. Facilities may prepare plans in the format of a regional instruction pertinent to assigned shore and afloat units. Regardless of the format chosen, the content and complexity of OW/WO Management Plans will depend upon the

characteristics of the individual activity or region as described below.

(1) Tier I activities. Tier I activities, because of their size, function, and geographic location, require management plans written from a regional perspective. These activities are the homeport to a large number and variety of ships where high volumes of bilgewater are generated daily. They are near enough to other Navy activities that planners should consider regionally shared OW/WO management strategies and alternatives for collection, storage, transfer, treatment, and disposal.

The Regional Environmental Coordinator (REC) for each Tier I activity shall develop and implement a Regional OW/WO Management Plan, with each individual oil-handling Navy installation within the geographic region of the Tier I activity having its own OW/WO Management Plan based on the most feasible regional alternative. The REC shall forward these plans to the Area Environmental Coordinator (AEC) for approval.

Tier I activities requiring OW/WO Management Plans written from a regional perspective are Commander, Navy Region Mid Atlantic (COMNAVREG MIDLANT NORFOLK VA), Commander, Navy Region Southwest (COMNAVREG SW SAN DIEGO CA), and Commander, Navy Region Hawaii (COMNAVREG PEARL HARBOR HI).

(2) Tier II activities. Tier II activities are major homeports and shipyards that are not part of a major geographic complex of activities covered by Tier I Regional OW/WO Management Plans. The requirements for Tier II activities are the same as for Tier I activities, except that the Tier II plans will not be written using a regional approach, but will be written specifically for the individual activity or complex, including tenant commands. The host activity is responsible for the development and implementation of the OW/WO Management Plans for Tier II activities, and forwards these plans to the cognizant REC for approval.

Tier II activities are:

(a) NAVSTA Mayport, FL

(b) SUBASE Kings Bay, GA

(c) NAVSHIPYD Portsmouth NH

(d) NAVMARIANASUPPACT GUAM

(e) NAVSHIPYD Bremerton, WA

(f) SUBASE Bangor, WA

(g) SUBASE New London, CT

(h) NAVSTA Everett, WA

(3) Tier III activities. Tier III activities are home ports not listed as Tier II activities and not covered by a Tier I OW/WO Management Plan. This category also includes other naval installations that may not serve as home ports but do have periodic ship berthing. Activities scheduled for Base Realignment and Closure are also Tier III activities. A Tier III activity may not require an OW/WO Management plan if ships do not routinely generate OW/WO or if they generate a small amount and dispose of it by methods that meet Federal, State, and local requirements. Activities planned for closure may need OW/WO Management Plans if there are specific regulatory concerns or if the existing operations are not cost-effective. Based on information provided by Tier III activities, RECs may waive the development of a discrete OW/WO Management Plan; otherwise, Tier III activities shall develop and submit an OW/WO Management Plan for cognizant REC approval.

e. The REC shall decide when to update the OW/WO Management Plans for Tier I activities, and the host activity will decide for Tier II and III

activities. Updates are necessary when significant operational changes occur that affect OW/WO collection, treatment and/or disposal; when construction of collection, treatment and/or disposal facilities are completed; and, when responsibilities for OW/WO management are transferred from one command to another.

f. The REC shall submit an annual OW/WO status report to CNO via the chain of command for Tier I activities. It will provide a summary of OW/WO management efforts in the region for the previous year. The report shall contain, at a minimum, the following for each activity managing shipboard OW/WO:

(1) Brief description of current OW/WO management practices;

(2) Brief description and status of projects for installation of OW/WO collection, treatment and/or disposal facilities completed in the previous year or planned;

(3) Status of ODR phase out, including number of ODRs eliminated in the previous year and number of ODRs remaining in use;

(4) Summary of the previous year's OW/WO management costs; and

(5) Brief description of the current regulatory climate, including any permit conditions, enforcement actions or negotiations with regulators.

The REC should submit the report to CNO by 1 November of each year.

A) **9-5.5.2 Oil Discharge Raft Phaseout**

a. Navy policy is to eliminate the use of ODRs as soon as possible in all Navy ports.

b. ODRs may continue in use at facilities where existing infrastructure is not sufficient to collect or treat bilgewater and a detailed OW/WO Management Plan has established a plan of action with milestones for their eventual elimination.

9-5.5.3 Use of Oil Water Separators By Ships In Port. (A Section 19-5 includes additional oily waste management and operational requirements for ships. Navy policy is to maximize segregation, recycling, and reuse of fuel and oil. Shoreside collection of OW/WO, followed by recovery of recyclable product is, therefore, the preferred method of dealing with OW/WO from ships. However, ships equipped with OWSs and OCMs may discharge via those systems in port. Discharged effluent may not exceed 15 parts per million (ppm) of oil in water, cause a sheen, or violate any other applicable water quality standard. Before discharging via an OWS, chapter 19 requires ships to consult with the supporting shore facility host command for discharge requirements.

9-5.5.4 Collection, Treatment, and Disposal of OW/WO. Under the appropriate circumstances and after consultation among the concerned activities, commands responsible for writing the plans may modify responsibilities to achieve the most economical method of OW/WO management for the Navy. The responsible commands should examine all options to maximize use of current facilities including functional transfer of OW/WO facilities, funding, and operating responsibilities.

9-5.5.5 OW/WO as Hazardous Waste (A

a. Under normal circumstances, bilgewater does not exhibit the characteristics of a HW and does not typically contain listed HWs. Circumstances develop, however, when bilgewater can become a HW, such as when an event introduces a HW into the bilge or when State law defines bilgewater as a HW even though not specifically contaminated. Chapter 19 requires ships to notify shore receiving facilities before offloading bilgewater or any other OW/WO if oily waste is contaminated from other than routine sources, such as aqueous film-forming foam

(AFFF), solvents, anti-freeze, or other HM. Shore installations shall handle, store, transport, treat and dispose of such OW/WO per applicable HW regulations. Installations shall not use ODRs to receive such waste. Some States consider bilgewater as hazardous waste. Chapter 19 requires ships in those states to consult with the host receiving facility for collection and discharge requirements.

b. Generally, installations should manage bilgewater like any other waste. That is, the generator bears the responsibility for determining whether or not it is hazardous. Since wastes from ships are not regulated as HW until offloaded, the receiving shore facility is the generator. The receiving facility shall sample and test bilgewater and other OW/WO batches periodically to see if the waste is a "characteristic" HW under 40 CFR 261.24 or meets the toxicity criteria of 40 CFR 261.11. If it exceeds the standards of either criteria, installations shall manage it as HW. The OW/WO Management Plan shall contain sampling protocols and procedures and require actions to trace and eliminate the source of contamination. Installations shall determine frequency of testing by reference to the historic characteristics of samples and their level of confidence in the consistency of samples.

A) **9-5.5.6 Compensating Fuel Ballast Water Systems and OW/WO.** Under normal circumstances, compensating fuel ballast water is neither OW/WO nor HW. Chapter 19 requires ships to strictly comply with fuel transfer and ballasting procedures to ensure ballast water does not become contaminated with oil or any other waste. Ships using self-compensating fuel tanks are required to ensure adequate margin is preserved to prevent inadvertent discharges of oil with the compensating water. Some State regulations require supporting shore activities to collect and process compensating fuel ballast water before discharge to the environment. Activities in these states shall address collection, treatment, storage, and disposal of such water in the OW/WO Management Plans.

9-5.5.7 Funding. OW/WO Management Plans shall include a requirements plan specifying the fiscal year of the funding by fund type. This information shall parallel information identified in cognizant major claimant Program Objective Memorandum (POM) and Program Review submissions. A summary of project documentation submitted for approval shall be included for alternatives that require military construction or claimant-approved special projects. Funding types that may be required include: Military Construction, Navy (MCN); Military Construction, Naval Reserve (MCNR); Operations and Maintenance, Navy (O&MN); Operations and Maintenance, Naval Reserve (O&MNR); and Other Procurements, Navy (OPN). (A

9-6 Responsibilities

9-6.1 COMNAVFACENGCOM shall

a. Provide technical advice and prepare revisions to reference (k) to assist shore activities in the preparation of SPCC plans.

b. Provide technical and administrative guidance associated with the collection, segregation, re-refining and disposal of used lubricating oil.

c. Provide technical and administrative guidance associated with the collection, segregation, re-refining and disposal of used contaminated fuels.

d. Provide technical advice and prepare appropriate manuals or other forms of guidance for used oil management.

9-6.2 COMNAVSUPSYSCOM shall provide technical and administrative guidance to Navy shore activities concerning USCG and EPA regulations.

9-6.3 Major claimants shall

a. Ensure that shore activities meet EPA requirements related to the prevention of oil spills and the preparation and review of SPCC plans.

A) b. Provide maximum cooperation with and support to facilities and RECs in the development and implementation of OW/WO Management Plans, including functional transfer of OW/WO facilities or operating responsibilities, and funding of plan requirements under their cognizance.

c. Ensure subordinate commands update area or regional instructions, including SOPA and SOPA ADMIN instructions, consistent with this chapter and approved OW/WO Management Plans.

A) **9-6.4 Area Coordinators** shall review and approve Tier I regional OW/WO Management Plans.

A) **9-6.5 Regional Environmental Coordinators** for regions III and IX shall issue Tier I regional home port OW/WO Management Plans for the Norfolk and San Diego areas respectively, as approved by the Area Coordinator. All RECs shall review and approve Tier II and III installation OW/WO Management Plans or exempt Tier III installations from the requirement.

9-6.6 Commanding officers of shore activities shall

a. Prepare activity SPCC plans per Federal, State, and local requirements; implement and review within prescribed periods.

b. Identify and submit, under chapter 1, environmental compliance projects required for implementation of the activity SPCC plan.

c. Comply with Federal, State, and local requirements concerning oil pollution and used oil fuels for energy recovery.

d. Establish and maintain a used oil-recycling program.

e. Comply with USCG and RSPA regulations for transportation-related oil storage facilities and EPA for non-transportation-related facilities.

f. Ensure that facility operations manuals are prepared, maintained, and submitted per USCG guidance reference (e).

g. Comply with OPA 90 requirements to prepare facility response plans, as discussed in chapter 10.

h. Develop or provide assistance in developing OW/WO Management Plans as follows: (A

(1) Tier I installations shall provide assistance to the cognizant REC in developing and implementing a regional OW/WO Management Plan.

(2) Tier II installations shall develop OW/WO Management Plans and submit them to the cognizant REC. Servicing Engineering Field Divisions/Activities and RECs shall provide technical and legal assistance as needed.

(3) Tier III installations shall develop OW/WO Management Plans and submit them to the cognizant REC for approval unless exempted from this requirement by the REC. Servicing Engineering Field Divisions/Activities and RECs shall provide technical and legal assistance as needed.

CHAPTER 10

OIL AND HAZARDOUS SUBSTANCE SPILLS

10-1 Scope

This chapter identifies Navy requirements to plan for and respond to oil discharges and hazardous substance releases (OHS spills) from Navy vessels and shore facilities worldwide. This chapter summarizes Navy planning and response requirements for Navy and non-Navy OHS spills. Chapter 12 describes the comprehensive management of hazardous materials and hazardous waste. Chapters 9 and 19 discuss the prevention and minimization of oil pollution at shore facilities and aboard ship, respectively. Chapter 18 covers Navy policy for overseas activities, and chapter 27 identifies Navy responsibility with respect to Natural Resource Damages in the aftermath of OHS spills.

10-1.1 References.

a. 29 CFR 1910.119 and 120, Hazardous Waste and Emergency Response;

b. 40 CFR 117, 302 and 355, Reportable Quantities of Hazardous Substances.

c. 40 CFR 300, National Oil and Hazardous Substances Pollution Contingency Plan.

10-2 Legislation

10-2.1 Federal Water Pollution Control Act of 1972 (FWPCA) as amended by the Oil Pollution Act of 1990 (OPA 90), 33 USC § 1321

a. The FWPCA prohibits the discharge of oil and hazardous substances in such quantities as may be harmful into or upon the navigable waters of the United States, including the contiguous zone, exclusive economic zone and adjoining shorelines.

b. The FWPCA provides the authority for the establishment of the National Response Team, the National Response Center and the National Contingency Plan (NCP).

c. The NCP establishes the roles and responsibilities of various Federal agencies to provide for efficient, coordinated and effective action to minimize damage from oil discharges and hazardous substance releases.

d. The FWPCA, as amended by OPA 90, provides for the preparation and submission of response plans for tank vessels, offshore facilities, and onshore facilities that could reasonably be expected to cause substantial harm to the environment by discharging into or upon the navigable waters, adjoining shorelines, or the exclusive economic zone. The FWPCA must be read carefully as it contains different requirements for commercial and public vessels. The OPA 90 amendments to the FWPCA call for the periodic inspection of response equipment and drills. These amendments also establish new administrative and civil penalties for violations of the FWPCA and expand administrative provisions under the FWPCA.

e. Under the FWPCA, the NCP and Executive Order 12777, the Federal On-scene Coordinator (OSC) is the Federal official pre-designated by the Environmental Protection Agency (EPA) or the Coast

Guard to coordinate and direct response to OHS spills. The OSC has authority to enforce the administrative and criminal provisions of the law. The FWPCA also requires vessels and facilities to report OHS spills.

10-2.2 Oil Pollution Act of 1990 (OPA 90), 33 U.S.C. §2701 *et seq.*:

a. OPA 90 revises the FWPCA and other statutes to expand Federal and State involvement in the nation's oil and hazardous substances spill prevention, preparedness, and response activities. Public vessels are exempt from the provisions of OPA 90. Navy shore facilities must comply.

b. OPA 90 also establishes the Oil Spill Liability Trust Fund (OSLTF) as a source for funding removal costs, including the cost of monitoring removal actions, consistent with the NCP. The OSLTF is administered by the Coast Guard and consists of the Emergency Fund and the Principal Fund. The Emergency Fund is to fund removal actions by Federal OSCs, initiate Natural Resources Damage Assessments, and fund immediate removal actions by States. The Principal Fund is used to pay claims against the OSLTF and for congressional appropriations to carry out other OPA 90 requirements.

c. OPA 90 provides for natural resource trustees to act on behalf of the public to assess damages and to develop and implement a plan for restoration, rehabilitation, replacement, or acquisition of the equivalent of the natural resources injured, lost or destroyed as a result of a discharge of oil. For additional discussions of trustee responsibilities and natural resource damage assessment procedures, refer to chapter 27.

10-2.3 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §9601 *et seq.*

a. CERCLA provides the government with authority to compel persons to clean up releases of hazardous substances (HS). It also contains provisions which make responsible parties liable for the costs of clean-up, and the creation of the hazardous substance Superfund which enables an OSC to conduct clean-up.

b. CERCLA also requires facilities to report the release of any of the more than 700 listed hazardous substances to the National Response Center. CERCLA exempts oil from the list of hazardous substances created by the FWPCA/Clean Water Act (CWA) and the Toxic Substances Control Act, among others.

c. CERCLA gives the EPA (for inland zones) and the Coast Guard (for coastal zones) the authority to designate an OSC to direct emergency response and OHS removal activities. The OSC is provided with administrative and enforcement authority to implement the provisions of CERCLA. Under the NCP (40 CFR 300.120), the Department of Defense (DOD) is required to provide the OSC for releases of hazardous substances from DOD facilities or vessels.

10-2.4 The Emergency Planning and Community Right-to-Know Act of 1986, (EPCRA), 42 U.S.C. §11001, *et seq.* EPCRA requires industry and Federal (by subsequent Executive Order), State and local governments to report hazardous and toxic chemical releases to the public. EPCRA requires these entities to identify potential risks to a surrounding community from a facility or operation that handles hazardous substances and sets forth community notification procedures. (See chapter 4.)

10-2.5 Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6901, *et seq.*

a. RCRA establishes requirements for facilities which generate, transport, treat, store, or dispose of solid and hazardous wastes. RCRA has several programs, including very detailed and specific requirements for facilities that deal with hazardous wastes, non-hazardous solid wastes, underground storage tanks and used oil. In general, the RCRA regulations address the day-to-day management of hazardous wastes.

b. RCRA requires contingency plans designed to minimize hazards to human health and the environment. These plans should provide information on facility emergency equipment, evacuation, and coordination (40 CFR Parts 260-282). Activities must submit a copy of these plans to all local police and fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services.

10-2.6 Clean Air Act Amendments of 1990 (CAA), 42 U.S.C. §7401, *et seq.*

a. One of the goals of the CAA Amendments was to prevent the accidental release of regulated substances and other extremely hazardous substances into the air and to minimize the consequences of those releases. The amendments focus on preventive measures for those chemicals that pose the greatest risk.

b. Section 112(r) establishes a general duty for stationary facilities to identify hazards that may result from the release of regulated substances, to design and maintain a safe facility, and to minimize the consequences of releases when they occur.

c. In 1992, The Occupational Safety and Health Administration (OSHA) issued a Process Safety Management of Highly Hazardous Chemicals Rule, reference (a), under the CAA Amendments. Reference (a) directs employers to establish a process safety management program to prevent or mitigate catastrophic chemical workplace emergencies and requires employers to have an emergency action plan.

10-2.7 Occupational Safety and Health (OSH) Act, 29 U.S.C. §*651, et seq.*

a. OSHA is primarily responsible for protection of worker health and safety under the OSH Act. OSHA has several standards that cover emergency response planning for facilities that handle, store, or transport hazardous substances. These requirements serve to protect facility employees and emergency responders.

b. Reference (a) also includes provisions to clean up uncontrolled hazardous waste sites, implement corrective action and establish routine and emergency hazardous waste operations.

c. OSH is applicable to Federal employees by Executive Order. Employers must implement a program that includes a written safety and health program, site evaluation and control, training, personal protective equipment, monitoring, medical surveillance, decontamination procedures and an emergency response program. Title 40 CFR 302 (Designation, Reportable Quantities, and Notifications) lists reportable quantities of HS. Title 40 CFR 261.3 defines hazardous waste.

10-2.8 State and Local Programs

a. State programs requiring OHS spill prevention, preparedness, and response vary widely. All States require notification of State and local authorities of OHS spills. Certain States, and coastal States in particular, have stringent requirements for vessel and facility spill response plans and prevention measures that exceed Federal standards. DOD facilities, including Navy facilities, are subject to State and local facility prevention and response planning requirements.

b. Navy Shipboard Spill Contingency Plans (SCP) are not subject to State regulations. Commands may, however, provide courtesy copies of SCPs to State regulators to promote strong, cooperative relationships with the local community.

10-3 Terms and Definitions

10-3.1 Area Committees. The Federal, State and local agencies who cooperate to prepare an Area Contingency Plan and work with State and local officials to pre-plan joint response efforts.

10-3.2 Area Contingency Plans (ACP). A plan prepared by the Area Committee to respond to worst case OHS spill scenarios, which identifies equipment and personnel available for such response activities. The ACP also identifies and prioritizes sensitive areas and natural resources, identifies strategies for their protection, and pre-approves specific countermeasures and removal actions within the planning area.

10-3.3 Contiguous Zone. A zone of the high seas that is contiguous to the territorial sea (see section 10-3.29) and extends 9 nautical miles (nm) seaward from the outer limit of the territorial sea.

10-3.4 Discharge. Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil. It excludes:

a. Discharges by permit under the CWA.

b. Discharges resulting from circumstances identified, reviewed and made a part of the public record regarding a permit issued or modified under the CWA, and subject to a condition in such permit.

c. Continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under the CWA and caused by events occurring within the scope of relevant operating or treatment system.

The NCP defines discharge to include a substantial threat of discharge.

10-3.5 Dispersant. Any of several chemical agents that emulsify, disperse, or make soluble oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

10-3.6 Exclusive Economic Zone (EEZ). A zone extending 200 nm from the territorial sea baseline, or to the maritime boundary of another country closer than 200 nm.

10-3.7 Facility. Any structure, group of structures, equipment or device (other than a vessel) used for one or more of the following purposes: exploring for, drilling for, producing, storing, handling, transferring, processing or transporting OHS. This term includes any motor vehicle, rolling stock or pipeline used for one or more of these purposes.

10-3.8 Facility Incident Commander (FIC). Commanders or commanding officers (COs) of designated naval shore facilities or complexes pre-designated by the cognizant Navy On-Scene Coordinator (NOSC) and required to prepare an OHS Facility Response Plan covering the area assigned by the NOSC. FIC designations are based on OHS spill risk and response capability of the command to ensure rapid, effective response to OHS spills within the assigned area.

10-3.9 Federal On-Scene Coordinator (Federal OSC). The Federal official pre-designated by the U.S. Environmental Protection Agency (EPA) or the United States Coast Guard (USCG) to coordinate and direct Federal responses under the NCP, except for DOD HS releases. In the case of HS releases from DOD facilities or vessels, DOD pre-designates the Federal OSC. The NOSC is the Federal OSC for Navy HS releases.

10-3.10 Hazardous Substance

a. Any substance so designated by the FWPCA.

b. Any element, compound, mixture, solution, or substance so designated by CERCLA.

c. Any solid waste having the characteristics of, or listed as, a hazardous waste as defined under RCRA (but not including any waste suspended by an Act of Congress).

d. Any toxic pollutant listed under the CAA.

e. Any imminently hazardous chemical substance or mixture upon which the Administrator of the EPA has acted under the Toxic Substances Control Act (TSCA).

The term *does not* include petroleum, crude oil or any refined product (such as gasoline, diesel or fuel oil) not otherwise specifically listed or designated as a hazardous waste. Title 40 CFR Part 261.3.

The term *does not* include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

10-3.11 Incident Command System (ICS). An emergency response structure required by OSHA consisting of an individual in charge of the incident (Incident Commander) and four functional groups (Operations, Logistics, Planning and Finance) that support the Incident Commander. During major oil discharges, Federal agencies establish an ICS under the National Response System. State agencies may also establish an ICS. An ICS becomes a "Unified Command System" when the party responsible for the spill works jointly with State and Federal agencies. Where Navy is the potentially Responsible Party, the Navy Incident Commander, the State OSC, and the Federal OSC make up the Unified Command.

10-3.12 Navy On-Scene Coordinator (NOSC). The Navy official pre-designated to coordinate Navy OHS spill contingency planning and to direct Navy OHS spill response efforts in a pre-assigned area.

Shoreside NOSCs are normally Regional Environmental Coordinators (RECs) pre-designated by the cognizant Area Environmental Coordinator (AEC). (See chapter 1.) CINCPACFLT, CINCLANTFLT and CINCUS- NAVEUR pre-designate fleet NOSCs for assigned ocean areas. The NOSC is the Federal OSC for all Navy HS releases. The NOSC also acts as the incident commander for OHS spills beyond the FIC's assigned Area of responsibility (AOR), and as incident commander for spills which exceed the response capability of the FIC.

10-3.13 National Contingency Plan (NCP). The legal framework for Federal government OHS pollution contingency planning and response above the facility level. The NCP describes the National Response Team, the Regional Response Team and the National Response Center and designates the roles and responsibilities of DOD in national OHS spill response planning.

10-3.14 National Response Center (NRC). (800-424-8802 or 202-267-2675). The 24-hour OHS spill notification center, located at USCG headquarters in Washington, DC. The NRC is the single Federal notification point (outside the Navy chain of command) for emergency spill response. Having reported a spill to the NRC, an activity need make no further Federal notifications. The NRC is responsible for notifying the pre-designated Federal OSC of reported OHS pollution incidents.

10-3.15 National Response Team (NRT). The Federal response organization, consisting of 15 Federal agencies (including DOD), that coordinates OHS spill response and contingency planning efforts. The EPA chairs the NRT and the USCG sits as vice chair.

10-3.16 Navigable Waters. The surface waters of the United States, including the territorial seas. The term includes:

a. All waters currently used, used in the past, or susceptible to future use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;

b. Interstate waters, including interstate wetlands;

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, and wetlands, the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) That are used or could be used for industrial purposes by industries in interstate commerce;

d. All impoundments of water otherwise defined as navigable waters under this sub-section;

e. Tributaries of waters identified in paragraphs a through d of this sub-section, including adjacent wetlands; and

f. Wetlands adjacent to waters identified in paragraphs a through e of this sub-section: provided that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not navigable waters of the United States.

10-3.17 NOSC Response Plan. The Navy plan to respond to OHS spill incidents within the NOSC's pre-assigned AOR that are beyond the capability of the spilling facility or vessel.

10-3.18 OHS Facility Response Plan. A plan of action for facility spill scenarios (coordinated with the local ACP) which identifies notification procedures, response and cleanup capabilities, management information, environmentally sensitive areas, natural resource protection strategies and measures to protect human health and safety.

10-3.19 Oil. Animal, vegetable or petroleum-based oil of any kind or in any form, including, but not limited to, fuel oil, sludge, oil refuse, oil mixed with wastes other than dredge spoils and refined products such as gasoline, diesel, jet fuel, and cooking oil.

10-3.20 Public Vessel. A vessel owned (or bareboat chartered) and operated by the U.S., or by a State or political sub-division thereof, or by a foreign nation, except when such vessel is engaged in commerce.

10-3.21 Qualified Individual (QI). The term used by the Coast Guard and EPA to designate the individual identified in the Oil and Hazardous Substance Facility Response Plan (OHS FRP) and NOSC OHS Spill Contingency Plan who:

a. Is available on a 24-hour basis and able to arrive at the facility in a reasonable time;

b. Is familiar with the implementation of the plan;

c. Is trained in the responsibilities of the QI under the plan;.

d. Has authority to activate the OHS spill response organization;

e. Has authority to direct the obligation of funds required to carry out response activities; and

f. Will act as a liaison with the pre-designated Federal OSC.

10-3.22 Regional Contingency Plans (RCPs). RCPs are developed by the Regional Response Team to assist the OSC in the event that an incident exceeds the response capabilities identified in the ACP. The RCP sets forth the criteria permitting the use of alternative response techniques such as dispersants and in-situ burning.

10-3.23 Regional Response Team (RRT). The Federal response network under the NRT, consisting of representatives from regional Federal and State agencies. There are 13 RRTs, one for each of the 10 standard Federal Regions, and one each for Alaska, Oceana (Hawaii and the U.S. Pacific islands), and U.S. Caribbean islands. The RRT has the authority to approve or disapprove the use of alternative response techniques, such as dispersants, in-situ burning, and bioremediation.

10-3.24 Release. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, of any hazardous substance (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any HS or pollutant or contaminant). The term "release" *excludes*:

a. Any spilling, leaking, etc. that results in exposure to persons solely within a work place.

b. Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine.

c. Spilling, leaking, etc. of source, byproduct, or special nuclear material from a nuclear incident subject to the jurisdiction of the Nuclear Regulatory Commission, or any spilling, leaking, etc. of source, byproduct, or special nuclear material from any processing site designated under the Uranium Mill Tailings Radiation Control Act of 1978.

d. The normal application of fertilizer and herbicides.

The NCP defines discharge to include a substantial threat of discharge.

10-3.25 Release, Federally Permitted. Any release of HS in compliance with Federal law including the CWA, the CAA, the Solid Waste Disposal Act (SWDA), the Marine Protection, Research, and Sanctuaries Act (MPRSA), and the Atomic Energy Act.

10-3.26 Reportable Quantity. A release of a CERCLA-listed HS or an EPCRA-listed Extremely Hazardous Substance (EHS) exceeding the limit for that substance. HS or EHS releases that equal or exceed these limits must be reported to Federal, State, and local authorities immediately upon discovery. See reference (b) for a list of Reportable Quantities.

10-3.27 Responsible Party. The person or persons who have caused, or could potentially cause an HS release or oil discharge, including the following categories:

a. Vessels: Any person owning, operating, or bareboat chartering a vessel;

b. Onshore Facilities (other than a pipeline): Any person owning or operating the facility, except where possession and right to use Navy property has been transferred to another person by lease, assignment, or permit;

c. Offshore Facilities (other than a pipeline or a deepwater port licensed under the Deepwater Port Act of 1974 (33 USC §1501 *et seq.*)): The lessee or permit holder of the area in which the facility is located or the holder of a right of use or easement granted under applicable State law.

10-3.28 Spill of National Significance. A spill which, due to its severity, size, location, actual or potential impact on the public health and welfare, or the environment, or due to the necessary response effort, is so complex that it requires extraordinary coordination of Federal, State, local, and Responsible Party resources to contain and cleanup the discharge.

10-3.29 Sunken Navy Vessel. For the purposes of this chapter, a sunken Navy vessel, is an older, historic vessel that has been sunk due to armed conflict, act of God, or other reason. Such a vessel, for which the U. S. Navy retains title, may be located anywhere in the world.

10-3.30 Territorial Sea. For the purposes of this chapter, the territorial sea extends 3 nm seaward from the mean low water line of the nearest U.S. shoreline, including islands. (For international law purposes, however, the "territorial sea" extends 12 nm from shore.) See also sub-section 10-3.3 of this chapter.

10-3.31 United States (U.S.). The several States, District of Columbia, Commonwealth of Puerto Rico, Commonwealth of the Northern Marianas Islands, Guam, American Samoa, U.S. Virgin Islands, and any other territory or possession over which the U.S. has jurisdiction.

10-3.32 Vessel. Every type of watercraft or other artificial conveyance used, or capable of being used as a means of transportation upon the navigable waters of the U.S.

10-4 Requirements

10-4.1 Facility Response Plans (FRP)

a. Facilities must submit FRPs for a broad range of activities. Four Federal agencies regulate the different categories of facilities required to submit FRPs.

(1) The USCG regulates deepwater ports and marine transportation-related facilities. See Title 33 CFR 150, Deep Water Port Operations, and 33 CFR 154, Facilities Transferring Oil or Hazardous Material in Bulk.

(2) The EPA regulates non-transportation-related onshore facilities. See Title 40 CFR 112, Oil Pollution Prevention.

(3) The Research and Special Programs Administration (RSPA) of the Department of Transportation regulates mobile facilities (tank trucks, railroad cars, and portable tanks). See Title 49 CFR 130, Oil Discharge Prevention and Response Plans for Oil Transportation. RSPA also regulates onshore pipelines. See Title 49 CFR 194, Response Plans for Onshore Oil Pipelines.

(4) The Minerals Management Service regulates offshore platforms and offshore pipelines. See Title 30 CFR Parts 250 and 254, Response Plans for Offshore Oil Pipelines.

b. Most Navy facilities fall under either USCG or EPA jurisdiction. Facilities meeting the criteria for more than one type of facility are "complex facilities." Many Navy facilities fall under this category. A few Navy facilities with pipelines that leave the facility may also fall under the RSPA's jurisdiction. Additionally, Navy facilities with mobile sources may also fall under RSPA's jurisdiction. No facility requires more than one OHS FRP. However, each facility must submit an OHS FRP to each Federal agency that has jurisdiction over it. The requirements for the OHS FRP vary widely depending on the type of facility. For example, the information required for a mobile facility is not as extensive as that required for a non-transportation-related facility. There are certain essential elements common to all. These include:

(1) An individual who can be reached on a 24-hour basis and has the authority to take necessary response action.

(2) An emergency section of the plan that provides concise response direction.

(3) Extensive drills and exercises with specified documentation and record-keeping.

(4) A provision for regular update and review of FRPs.

10-4.1.1 Integrated Contingency Plan (ICP). A 1990 revision of the Clean Air Act required a Presidential Review of Federal statutes that addressed prevention, mitigation, and response to hazardous materials releases. The Presidential Review concluded that multiple laws and regulations, developed independently within the regulatory agencies, resulted in an expansive contingency planning structure. Additionally, the costs associated with developing multiple facility contingency plans, including reviews, updating, and plan re-submissions, represent a heavy financial requirement for plan holders. The NRT recommended consolidating the multiple requirements and revising the formats into a single Integrated Contingency Plan (ICP). The ICP offers a format for combining facility response planning documents into a single response document. An ICP is a single OHS spill response plan that fully complies with the OPA 90 regulations and, in addition, covers applicable response plan requirements from USCG, RSPA, OSHA, and EPA. Activities may elect to develop an ICP instead of a dedicated FRP.

10-4.1.2 ICP Replacement of FRP. Facilities with multiple planning requirements may elect to adopt the ICP format to take advantage of potential cost savings. Facilities should do so when submitting their various plans for agency approval.

The intent of the ICP option is not to create a new document, but to fold existing plans into a basic ICP format as they require resubmission. Facilities do not need to convert all current response plans to the ICP format at one time. A phased approach is encouraged to space the cost of conversion over a period of years.

10-4.2 Reporting OHS Spills

10-4.2.1 Within the U.S. Federal law requires that responsible parties immediately report to Federal authorities all OHS spills within U.S. jurisdiction (including U.S. waters, territories and possessions). Federal law provides criminal penalties for failure to report OHS spills.

a. **Quantities to Report.** Navy commands shall report by voice to the National Response Center at USCG Headquarters (NRC):

(1) Any discharge of oil which causes a sheen upon (or discoloration beneath) the surface of the navigable waters of the United States;

(2) Any discharge of oil which threatens to reach the navigable waters of the United States;

(3) Any release of a hazardous substance in the United States (its territories, possessions or navigable waters) in excess of quantities proscribed by reference (b).

(4) When in doubt call the NRC.

b. **Facilities.** Navy facility commanders shall immediately report the fact and nature of any OHS spill from Navy installations by voice to the NRC at 1-800-424-8802 or 202-267-2675. Facility commanders shall also comply with State and local reporting requirements immediately thereafter.

c. **Vessels.** While public vessels are generally exempt from State and Federal reporting requirements, commanding officers and masters of Navy vessels shall immediately report the fact and nature of an OHS spill from their vessel by voice to the NRC at 1-800-424-8802 or 202-267-2675.

d. **Excess Navy Property.** Caretakers shall continue to report OHS spills from excess Navy property until the property passes to the management and control of local reuse authorities.

e. **Immediate Voice Report.** Activities should not delay NRC notification in order to obtain more detailed information about the incident. Immediate voice notification to the NRC fulfills all Federal notification requirements. If reporting activities cannot reach the NRC by voice on the first attempt, they shall immediately notify the nearest EPA office or USCG station.

f. **Sheen Sightings.** Responsible environmental stewardship and longstanding maritime tradition require that commanding officers report to proper authorities any oil on the water's surface discovered in the course of daily operations— whether at sea or in port—whether attributable to Navy sources or not. Accordingly, commanding officers shall submit voice and Navy message reports to appropriate Federal, State, local and military authorities for any oil sheen discovered by naval personnel—even if the cause or source of the spill is unknown. Such reports, however, should ***not speculate as to cause or source*** and ***clearly indicate that a Responsible Party cannot be identified*** from information then currently available.

g. **Extremely Hazardous Substances.** In addition to the reporting requirements set forth above, EPCRA requires all activities to report to State Emergency Response Commissions and Local Emergency Planning Committees any release of a reportable quantity of an Extremely Hazardous Substance that crosses the facility boundary or escapes to the atmosphere. See chapter 4.

10-4.2.2 Outside the U.S. For host nation reporting requirements, facility commanders should refer to the final governing standards applicable to overseas installations.

10-4.2.3 Internal Navy Reporting. Commanding officers shall immediately report the fact and nature of any OHS spill from Navy vessels or installations (in any amount, at any location, worldwide) to their chain of command and cognizant NOSC as follows:

a. By voice immediately upon discovering the release.

b. By official Navy Message in the format provided at appendices H and I to this instruction as soon as practicable.

c. By update SITREP message as soon as the reporting activity becomes aware of new information concerning the origin, quantity, type, operation under way or cause of the spill. Similarly, ***if the final estimate of the amount released differs substantially from the amount initially reported,*** the reporting

activity must send an update SITREP message to all action and info addresses on the original spill message.

d. By sending a copy of every OHS spill report and follow-up message, including SITREPS and "after action reports" (where required by local instruction), to Chief of Naval Operations (CNO) (N45) and the Naval Facilities Engineering Service Center as addressed in appendices H and I.

NOTE

If you call the NRC, send a Navy message. If you call the State or local authorities, send a Navy message. If you are in doubt, send a Navy message.

10-4.2.4 OHS Release Report Message Format, Appendix H requires

a. Provided that prior voice reports have been made to the USCG National Response Center and the reporting command's chain of command, the reporting command shall use "Routine" precedence for Oil Spill Report Messages. If the command has not made both voice reports, it shall use "Priority" precedence on the written message.

b. To advise the NOSC and Navy leadership of the magnitude of the spill, reporting activities shall enter the following volume classifications on the Subject line of each Oil Spill Report Message:

SUBJ: OIL SPILL REPORT, X GALLONS, [ACTIVITY NAME] ; or
SUBJ: OIL SPILL REPORT, UNKNOWN VOLUME, [ACTIVITY NAME]; or

SUBJ: OIL SPILL REPORT, SHEEN SIGHTING

c. Estimates of volume spilled using sea level visual observation of oil on water are unreliable. To take the uncertainty out of volume estimation, reporting activities should examine loss at the source (i.e. through tank soundings or flow rate calculations). Message writers shall not report estimates of volume by visual observation alone.

d. To remove speculation from the Navy spill reporting process, commanding officers are directed to report only "Unknown" for the following report elements until such time as definitively established: source of spill, volume spilled, type of oil discharged, operation underway when spill occurred/discovered and spill cause. Commands should issue updating SITREP messages as soon as better information becomes available.

e. In the case of unknown volume or type of oil discharged, reporting activities should give particular attention to paragraph 8 in the message on "Slick Description and Movement."

f. Reporting activities should classify the cause of the spill by citing one or more of the following categories and ***then providing a narrative description of specific spill cause:*** Structural; electrical; hose; valve/fitting; tank level indicator; oil/water separator/oil content monitor; other equipment (specify component that failed); collision/grounding/sinking; valve misalignment; monitoring error; procedural or communications error; chronic or recurring discharge; or weather related.

10-4.3 OHS Spill Response. The NCP describes the roles and responsibilities of DOD in responding to DOD OHS spills.

a. In the case of a Navy HS release, the Navy assumes the role of the Federal OSC. As a Federal OSC, Navy will direct the Federal response effort, including coordination with the Area Committee and with other Federal, State, and local authorities.

b. In the case of oil, however, either EPA or the USCG assumes the broader role of the Federal OSC—depending upon the location of the spill. Typically, the EPA or USCG Federal OSC will merely monitor the Navy response effort and advise appropriate action, if necessary. If the EPA or USCG Federal OSC determines, however, that Navy response is inadequate or inappropriate, then the Federal OSC will assume command of response efforts. (In any case, COs and masters of public vessels remain in command of their vessels and personnel.)

c. The USCG or EPA Federal OSC will generally direct the response to a Spill of National Significance.

d. In the event of an OHS release from a Navy facility or vessel, the Navy will always assume initial responsibility for clean-up.

10-4.4 Non-DOD Spills. The Navy also responds to non-DOD spills. As one of 15 Federal agencies that comprise the NRT, DOD and its component Services must provide any response assistance they can upon request of the Federal OSC, insofar as such assistance would not impair DOD mission readiness. Additionally, the Naval Sea System Command's Supervisor of Salvage (SUPSALV) is one of several National Special Teams named in the NCP as available to provide assistance to the OSC. (See reference (c).) In the case of a large or salvage-related pollution incident, the Federal OSC may specifically request SUPSALV personnel, equipment, and expertise. To facilitate mobilization and funding of SUPSALV equipment and personnel for a non-DOD spill, SUPSALV and USCG have established an Interagency Agreement for Pollution Response.

10-4.5 Natural Resource Trusteeship. The NCP assigns responsibilities to certain Federal and State agencies for protecting natural resources held in trust for the U.S. public. In the aftermath of an OHS spill, The Secretary of Defense is responsible for protecting natural resources within Navy management and control. For further details on Natural Resource Trusteeship, see chapter 27 of this instruction.

10-5 Navy Policy

10-5.1 Navy Spill Response Planning

a. The Navy shall prepare to respond to Navy OHS spill incidents and undertake immediate, direct action to minimize the effect of a Navy OHS spill upon the environment. The Navy's OHS pollution contingency planning and response organization executes this policy. This organization uses existing chains of command and regional coordination authorities to satisfy the requirements and intent of applicable statutes and regulations.

b. In addition to response assets available from local Navy activities, commercial oil pollution response assets (available through Basic Ordering Agreements pre-negotiated by the USCG) may be a commanding officer's best means of meeting the response requirements of more significant spill scenarios.

When engaging commercial spill response assets, Navy commands should carefully assess and monitor legal, financial and technical factors.

c. The NOSC should consider activating SUPSALV for all OHS spills that exceed local capabilities. SUPSALV maintains and operates an extensive inventory of oil discharge containment and recovery equipment with the requisite knowledge and expertise to support such operations.

d. Membership in oil spill cooperatives potentially exposes the Navy to the risk of significant liability. Accordingly, Navy activities considering membership in an oil spill cooperative shall forward to CNO (N45) a request to participate.

10-5.2 Health and Safety. The health and safety of Navy personnel and the public shall be the highest priority of all Navy OHS spill response operations. Responders shall comply with all requirements of reference (a) and OPNAVINSTs 5100.19D and .23E.

10-5.3 Navy Spills. The Navy will respond immediately and effectively to all Navy OHS spills. Navy policy is to conduct all Navy OHS pollution responses in such a manner as to retain control of the response. Should the Federal OSC assume control of an oil spill response—upon a determination that Navy response actions are ineffective or inadequate—commanding officers and masters of Navy vessels will remain in command of and responsible for their vessel and crew.

10-5.4 Military Sealift Command (COMSC). The Navy will manage response to OHS spills from vessels, owned operated or chartered by COMSC, as follows:

a. Any vessel carrying the designation of United States Naval Ship (USNS) is a public vessel of the United States. The NOSC will respond to an OHS spill from a USNS vessel just as it would a spill from any other Navy vessel.

b. Any vessel owned by the U.S. Maritime Administration (MARAD) and operated under MSC control is a public vessel of the United States. The NOSC will respond to an OHS spill from an MSC controlled MARAD vessel just as it would a spill from any other Navy vessel.

c. Vessels under bare-boat charter (or long term build-to-charter lease) to MSC ***and operated by MSC exclusively for the benefit of the United States***, are public vessels of the United States for the purposes of this instruction. The NOSC will respond to an OHS spill from such a vessel just as it would a spill from any other Navy vessel.

d. Commercial vessels under time or voyage charter to MSC are ***not*** public vessels and must comply with all international, Federal and State pollution prevention and control regulations. Such regulations generally do not permit commercial vessels to cite or rely upon Navy response assets in their OHS spill contingency plans.

10-5.5 Non-Navy Spills. The Federal OSC may request Navy response assistance for non-Navy spills. The Navy will respond to such requests under the terms and conditions of the NCP and the Navy SUPSALV/Coast Guard Interagency Agreement for Pollution Response.

10-5.6 Salvage-Related Spills. The Navy shall direct response efforts to pollution incidents resulting from Navy vessel casualties such as grounding and collision. Fleet salvage forces shall take all reasonable precautions to reduce the threat of OHS pollution from stricken Navy vessels.

10-5.7 Collision with Navy Vessels. Where a collision between a Navy vessel and non-Navy vessel results in an OHS spill from the non-Navy vessel, the Navy will provide immediate spill response assistance, regardless of fault. In such situations, the cognizant Navy Fleet Commander shall report the spill, monitor the situation and offer appropriate support to the stricken vessel.

10-5.8 Non-Navy DOD Spills. In the case of large marine oil discharges, requests for Navy assistance from the Defense Logistics Agency, the Marine Corps or other DOD components are particularly likely. Navy response to such requests shall be consistent with procedures established by the DOD and any applicable inter-service agreement.

10-5.9 Oil Spills from Sunken Navy Vessels. The Navy retains title to a number of vessels that were sunk while in Navy service due to armed conflict, act of God or other reason. Navy response to oil spills from such vessels, or oil spills that are reported to be from such vessels, shall be conducted in accordance with the procedures in Appendix P.

10-5.10 Natural Resources Damages. In the case of a Navy OHS spill or a non-Navy spill which threatens natural resources within Navy management or control, the Navy will immediately undertake a preliminary assessment of the risk to natural resources and take all reasonable measures necessary to mitigate potential injury to same. Chapter 27 of this instruction details Navy policy on Natural Resource Damages.

10-5.11 Training. Navy activities shall train all Navy personnel involved in OHS spill contingency planning and response in accordance with chapter 24 of this instruction, and reference (a).

10-5.12 Drills and Exercises

a. Facilities. Navy shoreside facilities shall conduct one OHS spill notification drill during each calendar quarter. One of these emergency procedure drills shall be unannounced each year. Facilities with spill response equipment shall also conduct one equipment deployment drill in each 6-month period. Each shore facility shall conduct one spill management team table-top exercises each year, in accordance with its OHS Facility Response Plan. Facility spill management team personnel shall, once in each 3-year period, participate in NOSC or USCG sponsored "area exercises" designed to test worst-case spill response capabilities. Activities shall document each of these drills and exercises in accordance with the OHS Facility Response Plan. Navy facilities may take drill and exercise credit for actual spill events, if the events meet drill and exercise objectives. Facility commanders shall periodically evaluate their facility response plans in light of the lessons learned from drills and exercises.

b. NOSCs. NOSCs shall, once in each 3-year period, exercise regional spill management team personnel in NOSC or USCG sponsored "area exercises" designed to test worst-case spill response capabilities. NOSCS shall document these exercises in accordance with the NOSC OHS Response Plan. NOSCs may take credit for actual spill events, provided the events meet triennial area exercise objectives. NOSCs shall periodically evaluate their NOSC OHS Response Plans in light of the lessons learned from these exercises.

10-6 Responsibilities

10-6.1 **COMNAVSEASYSCOM** shall

a. Assist AECs in the development and update of the area-wide OHS spill contingency planning and response instructions.

b. Develop and issue the NOSC plan format, and assist NOSCs in major OHS pollution response issues as they arise and in decision-making for major or offshore/salvage-related response operations.

c. Assist NOSCs in the development and updating of NOSC plans to include worst case spill scenario planning.

d. Assist NOSCs in meeting drill and exercise requirements for testing and exercising Navy capabilities to respond up to worst case spill scenarios.

e. Provide expertise and equipment at the request of the NOSC for offshore or salvage-related OHS pollution incidents.

f. Coordinate the dissemination of lessons learned from major drills, exercises and spill events.

g. Determine requirements, budget for, and obtain investment category equipment for major and salvage-related spill response.

h. With COMNAVFACENGCOM, assist major claimants' response training needs, and develop and provide associated training curricula and courses.

i. Provide advice, personnel, and equipment, as appropriate for joint salvage/pollution operations.

10-6.2 **COMNAVFACENGCOM** shall

a. Assist facility commanders and commanding officers with the development of OHS FRP plans.

b. With COMNAVSEASYSCOM, assist major claimants and AECs in the determination of emergency response training needs, and develop and provide associated training curricula and courses.

c. Determine requirements, budget for, and obtain investment category equipment for inland water and harbor oil discharge control.

d. Coordinate Navy access to USCG Basic Ordering Agreements for response to spills beyond the capability of the facility.

e. Review and, if appropriate, approve requests by Navy shore commands to participate in spill cooperatives.

f. Provide Naval Oil and Hazardous Substance Spills Annual Report to CNO.

10-6.3 All Major Claimants shall

a. Ensure that all staff personnel within their claimancy who have responsibilities under this chapter (including but not limited to safety, public affairs, logistics, legal, comptroller, security, communications and transportation personnel) receive the general environmental overview training specified in chapter 24 of this instruction and introductory or executive overview training in emergency response management and become familiar with the provisions of this chapter.

b. Fund OHS spill response expenditures beyond the capability of the Navy subordinate activity ultimately responsible for the cost of spill clean-up.

c. Ensure cognizant facilities fully comply with Federal, State and international/foreign, laws and regulations for spill prevention, readiness, and response.

10-6.4 Fleet CINCs/AECs shall

a. Develop and periodically update an area-wide OHS spill contingency planning instruction specifying NOSC and facility responsibilities for OHS spill contingency planning and response in the AOR.

b. Pre-designate NOSCs to plan for and direct response efforts to OHS spills from Navy vessel and shore activities throughout their AOR.

c. Coordinate with SUPSALV for the development, revision and update of the area-wide OHS spill contingency planning instruction and the individual NOSC plans.

d. Establish contingency planning and response policies in their areas consistent with this instruction.

e. Establish a spill response training program consistent with this chapter and regulatory requirements.

10-6.5 Fleet NOSCs shall

a. Develop area-wide fleet NOSC plans in a format prescribed by COMNAVSEASYSCOM and the AEC instructions. Coordinate these plans with adjacent shoreside NOSCs. Plan coverage shall provide for vessels under the Fleet NOSC's operational control and for vessels not under their operational control but outside any adjacent NOSCs AOR.

b. Promptly notify Federal, State, regional, local, or foreign governments when required.

c. Ensure that Operation Orders and instructions containing guidance or policy for fleet OHS pollution response are consistent with fleet NOSC plans and Senior Officer Present Afloat (SOPA) instructions.

d. Coordinate shoreside NOSC plans with fleet planning and operations and ensure that Navy SOPA instructions contain guidance for fleet OHS spill response that is consistent with the shoreside NOSC plans.

e. Direct response operations and coordinate closely with ongoing fleet salvage operations

f. Ensure the health and safety of response personnel at any point during on-scene response

10-6.6 Shoreside NOSCs (in U.S. Areas) shall

a. Ensure Navy facilities can control, contain and clean up OHS spills, and evaluate impacts to natural resources. The shoreside NOSC may direct all major response efforts for Navy OHS spills within assigned shoreside boundaries to include coastal areas out to the 12 nm zone.

b. Serve as the Federal OSC under the NCP for Navy HS releases within assigned geographic boundaries.

c. Pre-designate shoreside FICs and pre-assign geographic areas for response.

d. Coordinate response operations with adjacent NOSCs, including fleet NOSCs, for Navy OHS spills that may have an impact on more than one NOSC region.

e. Ensure the health and safety of response personnel at any point during on-scene response.

f. Develop, in the general format prescribed by COMNAVSEASYSCOM or the AEC's instructions, area-wide NOSC OHS spill response plans, and coordinate the development of the plans with the applicable RCPs and ACPs. Shoreside NOSCs shall ensure that an appropriate plan or plans cover all facilities.

g. Coordinate with other DOD component OSC plans, including Marine Corps plans, to the extent specified by the DOD or as required by any Navy/DOD component inter-service agreement.

h. As a minimum, conduct a thorough annual response plan review for all facilities and, if necessary, revise the NOSC plan.

i. Coordinate response operations with the DOD representative to the RRT.

j. Direct and coordinate response operations closely with ongoing fleet salvage operations.

k. Coordinate shoreside NOSC plans with fleet planning and operations.

l. Take the lead in coordinating triennial exercises.

m. Coordinate a drill schedule for all facilities under the NOSC's cognizance to effect cost savings and ensure uniformity and effectiveness of the exercises.

n. Conduct combined exercises, whenever appropriate to reduce costs.

o. Coordinate with SUPSALV to ensure that facilities within the NOSC's cognizance receive credit for oil spill removal organization drills conducted within the response area.

p. Ensure that activities in their area of responsibility act in accordance with all Federal, State, and local OHS spill notification procedures. (See 10-4.2.)

q. Establish a spill response training program consistent with this chapter and regulatory requirements.

10-6.7 Shoreside NOSCs (in Foreign Areas) shall

a. Develop overseas NOSC OHS spill contingency plans in the format prescribed by COMNAVSEASYSCOM, consistent with AEC instructions and Final Governing Standards, and coordinate the development of these plans with applicable host nations.

b. Oversee response operations for Navy OHS spills within assigned areas and coordinate response operations with adjacent NOSCs and with applicable foreign nation agencies.

c. Pre-assign geographic areas for response by USN shore facilities.

d. Ensure that activities in their area of responsibility act in accordance with all required foreign country OHS spill notification procedures, within the guidelines established by the overseas environmental baseline guidance document (OEBGD) and applicable Final Governing Standards.

e. Establish a spill response training program consistent with this chapter and regulatory requirements.

10-6.8 Shoreside Commanding Officers (Designated FICs) shall

a. Oversee response efforts for Navy OHS spills within pre-assigned areas until relieved by the NOSC, as well as support the NOSC for Navy response in areas outside the facility's boundaries.

b. Develop, annually review, and periodically update facility plans in a format prescribed by COMNAVFACENGCOM and coordinate these plans with the NOSC spill contingency plan.

c. Review FRPs for consistency with appropriate State and local environmental and emergency planning authorities.

d. Make all required Federal, State, and local notifications for Navy OHS spills and make Navy chain of command notifications up to the NOSC level.

e. Properly train assigned staff responsible for OHS response.

f. Accomplish all quarterly and annual drill requirements.

g. Incorporate drill and exercise requirements into routine business or other emergency drills wherever practicable.

h. Tailor training curricula to include State and local emergency response laws and regulations.

i. Maintain training records and documentation as required by Federal, State, and local regulations.

j. Maintain the readiness of the Navy spill response capability assigned to the facility.

10-6.9 Shoreside Commanding Officers (Not Designated FICs) shall

a. Develop, annually review and update activity OHS spill contingency plans in a format prescribed by COMNAVFACENGCOM.

b. Coordinate OHS spill contingency plans with NOSC OHS Regional Response Plans.

c. Properly train personnel who respond to or supervise the response to an OHS spill.

d. Accomplish all quarterly, annual and triennial drill requirements.

e. Incorporate drill and exercise requirements into routine business and emergency drills wherever practicable.

f. Tailor training to include State and local emergency response laws, ordinances and reg- ulations.

g. Maintain training records and documentation as required by Federal, State and local regulations.

h. Mitigate and clean up OHS spills from vessels and activities and reimburse, as appropriate, other commands that provide assistance.

CHAPTER 12

HAZARDOUS WASTE MANAGEMENT ASHORE

12-1 Scope

This chapter identifies requirements and responsibilities for the management of hazardous waste (HW) and medical/infectious waste at Navy shore facilities within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands. Navy policy with respect to Navy activities in foreign countries is provided in Chapter 18. Responsibilities for the management of hazardous materials (HM) aboard Navy ships are defined in Chapter 19, and responsibilities for the transfer of HM from Navy ships to shore facilities are defined in section 12-5.2.1.

12-1.1 References. Although this chapter deals primarily with HW management, an effective, overall HW management program must include HW and HM minimization and must integrate occupational safety and health policy into HW management. Relevant references are:

a. 29 CFR 1910.120, Occupational Safety and Health Administration (OSHA) Regulations on Hazardous Waste and Emergency Response;

b. 29 CFR 1910.1200, OSHA Hazard Communication Standard;

c. 40 CFR 116-117, EPA Regulations on Hazardous Substances;

d. 40 CFR 125, Criteria and Standards for the National Pollutant Discharge Elimination System;

e. 40 CFR 260-270, EPA Hazardous Waste Management Regulations;

f. 40 CFR 279, Standards for the Management of Used Oil;

g. 40 CFR 350, Trade Secrecy Claims for Emergency Planning and Community Right-To-Know Information and Trade Secret Disclosures to Health Professionals;

h. 40 CFR 370, EPA Hazardous Chemical Reporting and Community Right-To-Know Requirements;

i. 40 CFR 372, EPA Toxic Chemical Release Reporting Regulations;

j. 49 CFR 171-179, Department of Transportation Hazardous Materials Regulations;

k. DoD Directive 4001.1 of 4 September 1986, Installation Management; (NOTAL)

l. DoD Directive 4210.15 of 27 July 1989, Hazardous Material Pollution Prevention; (NOTAL)

m. DoD Directive 6050.8 of 27 February 1986, Storage and Disposal of Non-DoD Owned Hazardous and Toxic Materials on DoD Installations; (NOTAL)

n. OPNAVINST 4110.2, Hazardous Material Control and Management (HMC&M); (NOTAL)

o. OPNAVINST 5100.19C, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat; (NOTAL)

p. OPNAVINST 5100.23D, Navy Occupational Safety and Health (NAVOSH) Program Manual; (NOTAL)

q. BUMEDINST 6280.1A, Management of Infectious Waste; (NOTAL)

r. SECNAVINST 5191.1, Storage and Disposal of Non-DoD-Owned Hazardous and Toxic Materials on DON Installations; (NOTAL)

s. National Fire Codes, 307 Chapter 7, Hazardous Materials Storage; (NOTAL)

t. Botsford, J. et al. Regulated Medical Waste Definition and Treatment: A Collaborative Document. AORN JOURNAL *(Association of Operating Room Nurses, Inc)*, vol 58, no 1, pp 111-114, July 1993 (NOTAL).

NOTE:

Reference (n) describes the Navy integrated logistics approach for effective HM control and management. This chapter complements that policy by providing mandatory elements for an effective HW management program. Also see Chapter 3 for information on HM/HW pollution prevention.

12-2 Legislation

12-2.1 Resource Conservation and Recovery Act (RCRA). The Resource Conservation and Recovery Act (RCRA), which amended the Solid Waste Disposal Act, regulates the management of solid waste and HW. The Hazardous and Solid Waste Amendments (HSWA) of 1984 amended RCRA to include the cleanup, through corrective action, of releases of HW at RCRA-regulated facilities. RCRA requires cradle-to-grave management of HW through a record-keeping system that requires the manifesting of HW shipments from point of generation to ultimate disposal. HW treatment, storage, and disposal facilities are regulated through the issuance of operating permits. RCRA provides that EPA may delegate authority to States to regulate HW under State law in lieu of RCRA. Irrespective of whether EPA has delegated HW authority to a State, State HW substantive and procedural requirements, including the requirement to obtain State permits, are applicable to Navy facilities under the Federal Facility Compliance Act (FFCA).

12-2.2 Other Legislation. HM is governed by several laws including the Hazardous Materials Transportation Act, Occupational Safety and Health Act, the Clean Water Act (CWA), the Clean Air Act (CAA), and the Emergency Planning and Community Right-to-Know Act (EPCRA).

12-3 Terms and Definitions

12-3.1 Facility. For the purposes of this chapter, a facility is a contiguous piece of land with structures, other appurtenances, and improvements under common ownership or control, fence line to fence line.

12-3.2 Hazardous Waste. The term "hazardous waste" means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

a. Cause or significantly contribute to an increase in mortality or to a serious irreversible, or incapacitating reversible illness; or

b. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

NOTE:

The term solid waste includes solid, liquid, semi-solid and contained gaseous material.

State regulations may be more stringent and take precedence over Federal regulations.

12-3.3 Hazardous Waste Generator. Any person, by site, whose act or process produces HW

or whose act first causes a HW to become subject to regulation.

a. **Class I Generator**, (Large Quantity Generator). Monthly generation quantity of 1000 kilograms (kg) (2200 pounds (lbs)) or more HW or 1 kg (2.2 lbs) or more acute HW.

b. **Class II Generator,** (Small Quantity Generator). Monthly generation quantity of 100 - 1000 kg (220 - 2,200 lbs) HW and less than 1 kg (2.2 lbs) acute HW.

c. **Class III Generator**, (Conditionally Exempt Small Quantity Generator). Monthly generation quantity less than 100 kg (220 lbs) HW or less than 1 kg (2.2 lbs) of acute HW. Such generators are exempt from substantially all RCRA requirements. Further discussion is found in reference (e).

12-3.4 Infectious Waste. Infectious waste is liquid or solid waste capable of causing transmission of disease in human when the following factors are present:

a. There must be the presence of a pathogen, which is a microorganism that can cause infection. Many microorganisms are incapable of causing infection in humans.

b. The pathogen must be of sufficient virulence, which is the disease evoking power of the microorganism. Not all pathogens are equally capable of causing infectious disease.

c. The pathogen must be present in sufficient numbers of microorganisms for infection to occur.

d. The microorganisms must have a portal of entry, or a way to get into the body (either through mucous membranes, or a puncture, cut or wound).

e. There must be a susceptible host. All persons are not equally susceptible to infectious diseases (reference (t)). The categories listed below are to be considered infectious waste:

(1) Medical wastes from isolation rooms are often considered infectious waste. However, only those items that are contaminated or likely to become contaminated with infective material are defined as infectious waste.

(2) Microbiological wastes including cultures and stocks of etiological agents containing microbes that, due to their species, type, virulence, or concentration are known to cause disease in humans. Examples include specimens from medical and pathology laboratories, discarded live vaccines, wastes from production of biologicals, cultures and stocks of infectious agents from clinical research and industrial laboratories, and disposable culture dishes and devices used to transfer, inoculate, and mix cultures.

(3) Blood and blood products including waste blood, serum plasma, Pleurevacs, and hemovacs

(4) Pathological wastes including human tissues and organs, amputated limbs or other body parts, fetuses, placentas, and similar tissue from surgery, delivery, or autopsy procedures

(5) Sharps (discarded medical devices that have been used in animal or human patient care), including hypodermic needles, syringes, trocars, blood vials, scalpel blades, Pasteur pipettes, specimen slides, cover slips, glass petri plates, and broken glass potentially contaminated with infectious material

(6) Contaminated animal carcasses, body parts, and bedding, including contaminated animal carcasses, body parts, and bedding of animals that were intentionally exposed to pathogens.

12-3.4.1 The following items are not considered infectious:

a. Absorbent materials containing small amounts (<20 ml) of blood or body fluids and no free flowing or unabsorbed liquid.

b. Used products for personal hygiene, such as diapers, facial tissues and sanitary napkins.

c. Disposable products used during routine medical or dental procedures (e.g., rubber gloves, rubber dams, cotton and paper products, equipment trays, tubing and catheters).

d. Empty pill bottles and intravenous (IV) bags.

e. Expired, unused culture tubes and plates.

f. Packaging and overwrap.

12-4 Requirements

12-4.1 Hazardous Waste

a. **General.** Any activity that generates, transports, treats, stores, or disposes of HW and any activity that produces, burns, distributes, or markets any HW-derived fuels must notify the EPA or State environmental agency of their activities, obtain an EPA or State HW generator identification (ID) number, and comply with applicable Federal, State, and local HW laws and regulations. Federal activities located in a State with an EPA authorized HW program need only comply with such State HW law that has been authorized by the EPA. Federal activities located in a state with only a portion of an EPA authorized HW program will comply with Federal HW laws, and the authorized portion of state HW laws. State HW programs that have been authorized by EPA operate in lieu of RCRA. Compliance with applicable State and local HW regulations is also required.

b. **Identification of HW.** Generators must identify and designate all waste streams to determine if the waste streams are HW. HW is either "listed" (specifically named in Federal/State regulations) or may exhibit any of four characteristics:

(1) Ignitability

(2) Corrosivity

(3) Reactivity

(4) Toxicity (as determined by the toxicity characteristics leaching procedure (TCLP) or additional procedures under State law).

A determination of whether any of these four characteristics apply to a waste can be made by checking the definitions in the appropriate Federal and State regulations, comparing the properties of the waste to those that define HW, or by using EPA-approved test methods. Mixtures of a solid waste and a listed HW are also considered hazardous and are regulated under RCRA, unless such listed HW was listed solely because it exhibits a HW characteristic. Mixtures of solid waste and characteristic HW are considered hazardous only if the mixture still exhibits the hazardous characteristic.

NOTE:

Knowingly diluting a HW for the purposes of avoiding HW regulations is prohibited.

If a material is determined to be a HW, it may be subject to all, some, or none of EPA's HW regulations, depending on specific circumstances. It is the generator's responsibility to determine whether its waste is a HW subject to regulation under RCRA and/or applicable state and local laws.

c. **HW Generation.** Threshold monthly generation rates and accumulation quantities are established in Federal or State regulations. Gener-

ation rates between 100 and 1,000 kilograms per month subject the generator, known as a "Small Quantity Generator," to HW generator requirements that include obtaining an EPA ID Number, using the Uniform Hazardous Waste Manifest to ship wastes off-site. Small quantity generators are only allowed to store HW without a permit or interim status for up to 180 or 270 days subject to the requirements of reference (e). If more than 1,000 kilograms per month are generated, the generator and the waste are subject to full regulation under RCRA.

Generators become storers if they accumulate HW for longer than the times prescribed in State and Federal regulations. According to Federal HW regulations, HW accumulation at a satellite accumulation point is limited to a cumulative maximum of 55 gallons of all (not each) HW, or one quarter of acute HW, and such storage must be located at or near the point of generation and be under the control at all times of the operator of the process generating the HW.

For Large Quantity Generators, any wastes in excess of 55 gallons (cumulative) must be moved within 72 hours to a less than 90 day accumulation area or a permitted storage facility. Accumulations of HW in excess of 55 gallons stored for more than 90 days (less in some States) require a storage permit. A Small Quantity Generator may accumulate HW on site for 180 days or less without a permit or without having interim status provided that the quantity of waste accumulated on-site never exceeds 600 kilograms, and provided the Small Quantity Generator complies with all other applicable regulations.

Generators are obligated to send their HW to treatment, storage, or disposal (TSD) facilities that comply with RCRA regulations. The generator must certify that the method the generator has selected for treatment, storage, or disposal is that practicable method available to the generator that minimizes the present and future threat to human health and the environment.

Generators must certify on the HW manifest that they have HW minimization (HAZMIN) programs in place at their sites. The programs will be designed to eliminate the use of HM altogether if possible, or at least reduce the volume and toxicity of the HW.

A generator who generates a HW subject to Federal land disposal restrictions will notify the TSD facility that the waste is a restricted waste or certify that the waste meets the requirements for land disposal.

d. **HW Transportation.** Transportation of HW off-site requires a manifest (see paragraph 12-4.1.f). A transporter is subject to transportation requirements that, in large part, incorporate Department of Transportation (DOT) regulations concerning labeling, marking, placarding, use of proper containers, and spill reporting. Transporters must have a valid HW hauler's license and ID number to pick up and haul within the generator's State and a valid license to haul through those States along the designated route to the TSD facility. Licenses may be checked by contacting the State HW office. Contact the Defense Reutilization and Marketing Office (DRMO) for license information regarding DRMO contractors.

e. **HW Treatment, Storage, and Disposal.** TSD facilities need a permit to continue existing operations or to initiate new operations. EPA initially developed a two-part permitting procedure. A Part A application conferred interim status to an existing TSD facility allowing the TSD facility to operate until a final decision is made on the Part B final permit application.

TSD facilities may only be expanded or significantly changed and still remain in an interim status with the approval of EPA regional offices or the State HW office. Interim status cannot be conferred on a new TSD facility if operation commenced after 19 November 1980. In such instances, a final permit must be applied for and

obtained before operation begin. Any operation before award of a Part B permit or modification of an existing Part B permit must be approved by the cognizant State or EPA.

Any existing facility that becomes subject to RCRA, due to new regulations or amendments to the existing regulations, may be granted interim status after timely submission of a Part A application and may have a 12 month grace period to submit its Part B permit application.

f. **HW Manifest System.** The Uniform Hazardous Waste Manifest, or State equivalent, must accompany all HW transported over any public road. Manifests are normally prepared, and must be signed by the HW generator or designated representative. The manifest does not replace Defense Reutilization and Marketing Office (DRMO) Disposal Turn-in Document (DD 1348-1). In circumstances where DRMO is managing the pickup, transport, and disposal of HW for an activity, DRMO may prepare the manifest, but the responsibility for correct and complete manifest preparation remains with the generator.

NOTE:

DRMO is, in most cases, not the HW generator and assumes none of the HW generator's responsibility for ensuring that wastes are correctly profiled and that manifests and all required documentation and reports are accurate and complete. DRMO may enter the facility's ID number on the manifest, but it remains the facility's responsibility to verify all information and to sign the manifest. If HM is turned-in to a DRMO for resale and is later determined by the DRMO to be HW, the DRMO is then considered to be the generator and will fulfill the generator requirements. Records must be kept and manifests returned to the activity that actually generated the HW.

Sufficient copies of the manifest will be provided to allow the generator, each transporter, and the TSD facility operator designated to receive the HW to keep a copy for their records and to allow copies to be returned to the generator for recordkeeping and distribution to the appropriate State(s). Activities will also include a 24-hour manned duty telephone number in the "generator" block on each manifest. Each generator signatory will be authorized in writing to sign the manifest for the installation commander and/or permit holder, as appropriate.

g. **Reporting and Recordkeeping.** Generators will submit biennial reports (EPA Form 8700.13A) to the appropriate EPA regional office or designated State agency by 1 March of each even numbered year (Some States require an annual report, rather than the biennial report. Navy generators will also submit a Navy HW Annual Report to Naval Facilities Engineering Services Center (NFESC) each year. See paragraph 12-5.4). A HW generating activity must contact the TSD facility if a signed manifest has not been received within 35 days of the date the HW was shipped. Generators who do not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated TSD facility within 45 days of the date the HW was shipped, must file an exception report with the EPA or State, as appropriate.

Except as otherwise provided in State law, copies of manifests signed by the generator, the transporter, and the TSD owner or operator must be maintained for 3 years from the date the HW was accepted by the original transporter. Copies of reports filed with EPA will be retained for 3 years. Records of test results or waste analyses will be kept for 3 years from the date the waste was last sent to a TSD facility.

Generators of waste subject to land disposal restrictions must transmit notification to the TSD and

maintain a copy for five years.

Transporters will report any discharge of HW in transit as specified in Federal regulations.

Operators of TSD facilities will, as applicable, submit annual or biennial reports on EPA Form 8700.13B or a State form to EPA regional offices or designated State agencies. A report of unmanifested waste must be filed with the State HW office within 15 days from the time a TSD facility accepts HW that is not accompanied by a manifest. Additional reports are required for specific types of TSD facilities.

h. **Federal Facility Compliance Act (FFCA).** The FFCA of 1992 subjects Federal facilities to all provisions of Federal, State, interstate, and local HW laws and regulations. The full range of available enforcement tools, including civil fines and penalties, are available to EPA, States, and local governments in enforcing these laws and regulations. FFCA exempts agents, employees, and officers of the United States from personal liability for any civil penalty arising from acts or omissions within the scope of their official duties. The installation or command whose activities most directly led to the violation(s) is responsible for payment of possible penalties with its operating budget or other available sources of funds.

FFCA also requires payment of any non-discriminatory fees or service charges assessed in connection with a Federal, State, interstate, or local HW regulatory program. This includes assessment in connection with the processing and issuance of HW permits, amendments to permits, reviews of plans, studies, and other documents; and the inspection and monitoring of facilities.

12-4.2 Radioactive Mixed Waste. Sometimes RCRA HW becomes mixed with radioactive waste, creating a combination that is regulated under both RCRA and the Atomic Energy Act. All policy and other matters pertaining to such radioactive mixed waste are handled by the Director, Naval Nuclear Propulsion (N00N), if the waste resulted from naval nuclear propulsion work, and by DCNO (Logistics) (N4) for all other Navy mixed waste. RCRA Generator requirements apply to mixed waste. Reference Navy Nuclear Propulsion Program (NNPP) policy on HW management.

12-4.3 Infectious Waste Management. Federal facilities that generate infectious waste are responsible for complying with State infectious waste regulations. Federal facilities that transport infectious waste across State lines are also responsible for complying with the transporter, disposal, and manifesting requirements for the State into which it is transported. Requirements for waste generated aboard ships can be found in Chapter 19.

12-5 Navy Policy

12-5.1 General. The following elements of pollution prevention shall be incorporated into Navy HW processes:

a. HM considerations, especially those relating to environment, safety, and health shall be incorporated into the earliest stages of Integrated Logistics System (ILS) planning and acquisition.

b. Navy activities shall establish pollution prevention plans per Chapter 4 that address HM and HW and that encompass all aspects of health and safety of Navy personnel and protection of the environment.

12-5.2 Compliance with HW Management Requirements. Navy activities shall comply with applicable HW management requirements. Compliance with all aspects of an EPA-approved State HW management program is considered compliance with Federal requirements. Activities shall ensure that contractors performing work for the Navy on Navy property comply with all applicable requirements while on-site. If a State has a program that is not approved by EPA, Navy activities

shall comply with both the State and Federal program requirements.

12-5.2.1 Applicability of RCRA to Navy Ships and Navy Shore Activities.

a. The 1992 FFCA provides that any HW generated on public vessels (which includes Navy vessels) shall not be subject to the storage, manifest, inspection, or recordkeeping requirements of RCRA until such waste is transferred to a shore facility, unless:

(1) The waste is stored on the public vessel for more than 90 days after the public vessel is placed in reserve or is otherwise no longer in service, or

(2) The waste is transferred to another public vessel within the territorial waters of the United States and is stored on such vessel or another public vessel for more than 90 days after the date of transfer.

Used and/or excess HM and solid waste transferred from a Navy ship to a Navy shore facility shall be managed by the shore facility in compliance with applicable HM, HW and solid waste regulations. For all used HM and solid waste determined by the shore facility to be HW, the shore facility shall be the HW generator and shall assume all responsibility for subsequent management of the HW except for funding. Ships or fleet accounts as appropriate shall reimburse the receiving shore facility for HW handling and disposal, and for lab testing if needed.

Ships' forces are required to follow the requirements of reference (o) with respect to the segregation, packaging, handling, safety, and labeling of HM. In addition ships shall segregate solid wasted in compliance with regulations of the State in which the waste is to be off loaded; the receiving shore facility shall provide information regarding waste segregation requirements. The "Used Hazardous Material" label required by reference (o) for every container of used HM transferred from the ship contains a process description of how the HM was used. If identification and labeling are not provided by the ship, the receiving shore activity may designate ship's used HM and solid waste based on laboratory analysis, and charge the ship or fleet accounts for lab testing, and any additional handling, documentation, administrative and overhead costs. (Accurate process descriptions based on special knowledge will often suffice to allow the receiving shore facility to designate waste, and is preferable to expensive lab testing).

Cooperative, "partnership" relations between shore facilities and ships are encouraged. Ships shall make every effort to ensure HM and solid waste are properly segregated, identified and transferred; receiving shore facilities shall make every effort to provide quality, timely service to the ships. Shore facilities may refuse to accept HM or solid waste from ships if the segregation, identification, or process description is insufficient or incorrect, though to do so would acknowledge a breakdown in the desired cooperative "partnership" relation. Problems experienced with HM or solid waste received from a ship should be reported to the ship's commanding officer (CO), and if flagrant or repeated, to the ship's immediate superior in command (ISIC).

Retrograde of HM/HW from activities outside the continental U.S. (OCONUS) is not considered importation of HW under the RCRA regulations. Following proper arrangements, Navy activities shall accept OCONUS DoD shipments of HW.

A ship scheduled for decommissioning shall remove all HM prior to the date of decommissioning, to the extent practical and appropriate. All HM shall be removed from the ship and processed by the supporting shore activity within 90 days after decommissioning.

Except where used HM is transferred from a tended unit to a tender, ships shall only transfer used HM

to another ship during operations that preclude the ship entering a port in which normal offload may occur. Transfers of HM shall be for the sole purpose of returning the material to a supporting shore activity. Such transfers shall be approved by the operational commander prior to accomplishment. All used HM received by the receiving ship shall be offloaded within 5 working days of arrival at a U.S. Navy port.

b. **HM/HW from Navy Ships in Private Shipyards.** Federal contract law establishes several requirements regarding HW management under contracts, other than new construction, for work on board Navy ships in shipyards. Those requirements primarily affect Navy ships entering private shipyards for work administered by COMNAVSEASYSCOM; however, ships undergoing contracted work at Navy activities and under the cognizance of Commander, Military Sealift Command (COMSC) and Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM) are also affected. These requirements are discussed in Chapter 19.

c. **Transporting Shore-Generated Hazardous Waste Aboard Ship.** The Navy has not applied for and ships have not been granted an identification number by EPA for transport of HW. Therefore, ships shall not accept HW from a Navy shore activity, either within or outside the U.S., for transportation to another activity or facility, either within or outside the U.S. for processing and disposal.

12-5.2.2 Applicability of RCRA to Military Munitions and Ordnance. Navy and DoD current policy is that military munitions and ordnance are not a HW subject to regulation under RCRA until there is an intent for DoD to dispose of or destroy them. Sites used for disposal or destruction of ordnance by open burning or detonation, not related to training or Explosive Ordnance Disposal (EOD) emergency action, are subject to RCRA regulations. In that regard:

a. Assignment of munitions or ordnance to the Special Defense Property Account or Centralized Demilitarization Account does not by itself constitute a designation as a HW. Those munitions are, rather, awaiting a final decision of use, reuse, reclamation, sales, or demilitarization.

b. RCRA HW requirements are applicable to the demilitarization process at the point where a determination is made in writing by an authorized DoD representative that the munition shall be discarded rather than retained as an item of military ordnance.

c. After the decision is made to dispose of or destroy a military munitions or ordnance, such items shall be managed per RCRA requirements and strictly under DoD regulations. Any resultant products generated by a demilitarization process, such as ash, sludge, or a residue, shall be analyzed to determine if it is a RCRA HW and managed according to analytical results.

d. Explosive Ordnance Disposal (EOD) emergency response is a non-routine operation conducted to abate an imminent and substantial hazard to public health, safety, or property, and such operations are not subject to regulation under RCRA. If, however, the site is used for open burning or open detonation to dispose of or destroy munitions or ordnance not related to training or emergency operations, then such sites are subject to regulation under RCRA. RCRA requirements do not apply to EOD sites used solely for training or to sites used for emergency operations.

e. Munitions and ordnance firing/explosive activities for training, research and development, and quality assurance/quality control testing purposes shall not be considered demilitarization or disposal operations. Further, RCRA regulations are not applicable to the associated firing tables or impact ranges (as long as such areas are not used for demilitarization or disposal purposes).

f. Off-specifications small arms ammu-

nition of calibers up to and including 50 caliber shall not be considered "reactive" within the definition in RCRA. They could, however, be HW for some other reason such as toxicity.

g. Navy installations shall comply with appropriate RCRA permitting requirements for demilitarization operations for conventional munitions and ordnance. Permits obtained shall adhere to existing DoD procedures and provide for adequate protection of human health and the environment and shall avoid unnecessary administrative burdens or operational requirements that would limit DoD's flexibility in managing its demilitarization program.

h. The FFCA requires EPA, in consultation with DoD, to issue regulations on the application of RCRA to military conventional and chemical munitions. EPA is to examine DoD safety requirements and take them into account when issuing any regulations necessary to protect human health and the environment. When issued, these regulations shall further clarify the applicability of RCRA to conventional and chemical munitions.

i. The management of explosive HW components and associated explosive wastes shall be included in activity HW Management Plans.

12-5.3 HW Management Plans. Every Navy shore activity that generates HW shall develop and use a HW management plan, or a HW management component in its Pollution Prevention Plan. A HW management plan or component(s) shall:

a. Identify applicable Federal, State, and local regulations pertaining to the generation and management of HW.

b. Identify training requirements, and describe procedures for obtaining training and maintaining training records.

c. Assign responsibilities for the generation, designation, handling, treatment, disposal, and all documentation.

d. Describe all HW generation and management procedures.

e. Include or reference HW minimization plan and goals.

f. Include or reference contingency plans and emergency response procedures.

The plan or component shall be kept up to date to include changes in HW generation and uses, as well as, changes in applicable Federal, State, and local HW regulations. The plan or component shall include or reference minimization procedures sufficient to achieve DoD minimization goals. Tenant activities may be covered by the host CO's HW management plan.

12-5.4 Navy HW Annual Report. All Navy shore activities worldwide that generate, store, treat and/or dispose of HW, shall prepare an annual calendar year report (Report Symbol DD-A&T(SA) 1485 (5090)), per guidance provided by Naval Facility Engineering Service Center (NFESC). The completed annual report shall be mailed by 1 February to NFESC with a copy to the major claimant. Class I and II generators (as defined by EPA regulations), shall report separately and directly to NFESC. Class III generators who are tenants shall be accounted and reported for by their host activity. Class III generators not under a host command shall report separately and directly to NFESC. One-time wastes from spills and installation restoration actions shall be reported as a separate category and not counted as generated quantities for HW minimization purposes. Only waste meeting the definition of HW (listed or characteristic) shall be reported. See Chapter 14 for a discussion of other solid waste reporting.

12-5.5 Navy and Defense Logistics Agency (DLA) Interface on HW. The DLA's Defense Reutilization and Marketing Service (DRMS) is designated the responsible agency for worldwide

disposal of all HW. However, reference (k), permits COs to contract directly for HW disposal service when, "...they can get a combination of quality, responsiveness, and cost that best satisfies their requirements." The Assistant Secretary of Defense (Production and Logistics) (ASD(P&L)) in a memorandum dated 9 August 1989 (NOTAL) reemphasized the CO's prerogative to dispose of HW directly and specifies that, "...such decision should be concurred in by the component chain of command to ensure that installation contracts and disposal criteria are at least as stringent as criteria used by DRMS".

Navy installations shall use DLA HW contract disposal services as much as economically and operationally feasible. However, for those wastes not managed by DLA, or when necessary to get the combination of quality, responsiveness, and cost that best satisfies installations requirements, Navy installations may request some other appropriate contract authority to provide contracting services for HW disposal. An installation not using DRMS contract services shall insure the contract requirements comply with Federal, State, and local HW regulations, shall ensure contract requirements and contract quality control procedures are at least as stringent as those used by DRMS, shall obtain concurrence by their major claimant, and shall notify CNO (N45) of each contract for such services. Generator liability and responsibilities are the same whether using DLA HW contracting services, or any other HW contracting service.

12-5.6 HW Minimization. Navy activities shall reduce HW generation and disposal per reference (n) and by implementing a combination of the following procedures and processes in priority order:

a. Eliminating and/or reducing, at the source, the use of HM by changing the process, requirement, or materials used.

b. Substituting a less hazardous/toxic HM in the process.

c. Reducing and/or eliminating the generation of HW by production process or equipment changes.

d. Recycling/recovery and reuse of HM.

e. Reducing and/or eliminating excess and expired shelf-life HM.

f. Treating HW to reduce the volume or to reduce it to a less toxic or non-hazardous state.

g. Destruction of HW.

h. Disposal, as a last resort.

When requirements in technical directives or weapons system procedures require use of HM beyond the control of the activity, appropriate action shall be taken to advise the cognizant Echelon 2 command of the need for appropriate action.

12-5.6.1 Certification. Federal laws and regulations require certification on HW manifests that the activity, insofar as is economically practicable, has a program to minimize the volume and toxicity of wastes generated. To make such a certification, Navy activities shall have a pollution prevention plan or hazardous waste minimization plan with Plan of Action and Milestones (POA&M). See Chapter 3.

12-5.6.2 Goals. The long-term Navy goal is to eliminate HW disposal to the maximum possible extent by eliminating the use of HM and/or by implementing best management practices (BMPs) and best demonstrated available technology (BDAT).

12-5.7 Training

a. Every person who produces, packages, handles, treats or transports hazardous waste shall have received applicable NAVOSH Worker Right-

to-Know Training on hazardous materials, shall receive applicable training as shown on Figure 12.1, and shall receive job specific training regarding hazardous waste safety, packaging, labeling, handling, documentation, transportation and turn-in procedures specific to their installation. Training curriculum shall be tailored to include State and local HW laws and regulations. Training records and documentation shall be maintained by each command as required by Federal, State and local regulations.

b. Every person involved in hazardous waste management at naval shore facilities shall receive general environmental overview training specified in Chapter 24 of this instruction, shall receive specific comprehensive training on Federal, State and local HW regulations related to their job assignment as shown on Figure 12.1, and shall be familiar with the provisions of this chapter.

c. Environmental professionals at COMNAVFACENGCOM and Engineering Field Division (EFDs)/Engineering Field Activities (EFAs), Navy Regional Environmental Coordinators, major claimant and type commander environmental staffs, and legal environmental staff shall receive general environmental overview training specified in Chapter 24 of this instruction, introductory or executive overview training in hazardous waste management, and shall be familiar with the provisions of this chapter.

12-6 Responsibilities

12-6.1 COMNAVFACENGCOM shall:

a. As requested, provide technical assistance to major claimants and activities in complying with Federal, State, and local HW laws and regulations, and in the preparation of activity HW management, HAZMIN AND Pollution Prevention Plans.

b. Prepare an annual "Navy Hazardous Waste Annual Report." The report shall show plans and progress toward achieving goals by each major claimant and the Navy as a whole, and other information as directed by CNO (N45).

c. Assist ships, claimants, and shore activities in reaching a long-range goal of elimination of HW disposal to the maximum extent possible.

d. Designate and supervise Public Works Centers (PWCs) in receiving, storing, and shipping HW. Designated PWCs shall provide regional HW storage facilities and contract disposal for Navy HW.

e. As requested, assist shore activities in obtaining permits for all new HW management facilities.

f. Pay fees for applications and permits for construction of Military Construction (MILCON) funded HW management facilities from funds appropriated for the project.

Health and Safety Training Requirements for Hazardous Waste and Emergency Response

Hazardous Waste Clean-Up Sites

Staff

• Routine site employees	40 hours initial 24 hours field 08 hours annual refresher 24 hours supervised field
• Routine site employees (minimal exposure)	24 hours initial 08 hours field 08 hours annual refresher
• Non-routine site employees	24 hours initial 08 hours field 08 hours annual refresher

Supervisor/Managers of

• Routine site employees	40 hours initial 24 hours field 08 hours hazardous waste management 08 hours annual refresher
• Routine site employees (minimal exposure)	24 hours initial 08 hours field 08 hours hazardous waste management 08 hours annual refresher
• Non-routine site employees	24 hours initial 08 hours field 08 hours hazardous waste management 08 hours annual refresher

Treatment, Storage, and Disposal Sites

Staff

Other Emergency Response Staff

Level 1 - First responder (awareness level)[1]	Sufficient training or proven experience in specific competencies
Level 2 - First responder (operations level)[2]	Level 1 competency and 8 hours initial or proven experience in specific competencies
	Annual refresher
Level 3 - HAZMAT technician[3]	24 hours of Level 2 and proven experience in specific competencies
	Annual refresher
Level 4 - HAZMAT specialist[4]	24 hours of Level 3 and proven experience in specific competencies
	Annual refresher
Level 5 - On-the-scene incident commander[5]	24 hours of Level 2 and additional competencies
	Annual refresher

Note: See 29 CFR 1910.120 (q)(6).

1 *Witnesses or discovers* a release of hazardous materials and who is trained to notify the proper authorities

2 *Responds* to releases of hazardous substances in a defensive manner, without trying to stop the releases

• **General Site employees**	24 hours initial or equivalent 08 hours annual refresher
• **Emergency response personnel**	Trained to a level of competency Annual refresher

Note: See 29 CFR 1910.120 (e) and (p)(7).

[3] Responds aggressively to stop the release of hazardous substances

[4] Responds with and in support to HAZMAT technicians, but who has specific knowledge of various hazardous substances

[5] Assumes control of the incident scene beyond the first-responder awareness level

Figure 12.1

12-6.2 COMNAVSUPSYSCOM shall:

a. Establish and implement a HMC&M program as required by reference (n), throughout the supply system.

b. Maintain and update procedures and instructions to ensure that transportation, storage, and handling of HM/HW fully complies with applicable regulations.

c. Develop a program for the acquisition, stocking, and supply of conforming containers required for the transportation and storage of HW.

d. Include provisions in inter-service support agreements (ISSA) with DLA for DLA/DRMS/DRMO support of HW requirements Navy-wide.

12-6.3 Director, Naval Nuclear Propulsion (N00N), is responsible for all matters pertaining to radioactive mixed waste resulting from naval nuclear propulsion plants.

12-6.4 Chief, Naval Education and Training shall develop and provide training on the safety and occupational safety and health aspects of HW and HM to applicable Navy personnel.

12-6.5 BUMED shall:

a. Ensure reference (q) instruction on infectious waste management for Navy medical treatment facilities is current.

b. Ensure that subordinate commands comply with Federal, State, local and Status of Forces Agreement (SOFA) requirements regarding the identification, generation, handling, storage, transport, treatment, and disposal of infectious waste.

12-6.6 Major claimants and subordinate commands shall:

a. Ensure that their activities comply with applicable Federal, State, and local HW laws and regulations.

b. Ensure subordinate commands develop and use HW management plans or HW management component of Pollution Prevention Plan as required by section 12-5.3.

c. Budget and allocate sufficient resources to ensure shore activities manage HW per all applicable Federal, State, and local HW laws and regulations, including the assignment and training of operational and management personnel, operation and maintenance of equipment and facilities, transport and disposal of waste, etc.

d. Ensure their activities comply with Navy HM and HW management and reporting requirements.

12-6.7 Commanding officers of shore activities shall:

a. Develop and use a HW management plan, or HW component of a Pollution Prevention plan as required by section 12-5.3 of this chapter.

b. Budget, fund and manage HW in full compliance with applicable substantive and procedural Federal, State and local HW laws and regulations.

c. Cooperate with Federal, State, and local HW regulatory officials.

d. Provide reports and other required data and information to Federal, State and local HW regulatory agencies.

e. Submit an annual Navy HW report to NFESC.

f. If CO of host activities, serve as the HW generator for the "site" or "facility" as defined by the applicable regulatory agency, and obtain and maintain applicable HW generator ID number.

g. If CO, or officers in charge of a tenant activity, comply with the policies of this manual, and with written HW management plans established by the host CO.

h. Provide training for all personnel involved in HW management and operations under applicable Federal, State, and local requirements.

i. If in charge of port facilities receive HM from ships and process it for reuse or disposal per applicable Federal, State, and local regulations.

j. If a generator of infectious waste:

(1) Comply with the infectious waste management procedures specified in reference (q).

(2) Determine, evaluate and comply with Federal, State, local, or SOFA regulations that are more stringent than the requirements in reference (q).

(3) Request technical assistance, as required, from cognizant NAVFACENGCOM or BUMED in carrying out required actions.

(4) Budget and fund the operation and maintenance of facilities and equipment necessary to handle, store, transport, treat, and dispose of infectious waste per applicable Federal, State, local, or SOFA regulations.

12-6.8 Commanding officers of shore activities assigned to receive used/excess HM, solid waste or infectious waste from ships and HW from other shore activities shall:

a. Receive ship used/excess HM and solid waste and process it for reuse or for disposal as HW per Federal, State, and local environmental laws and regulations.

b. Provide accessible facilities to receive HW and to store it per applicable EPA and/or State regulations until the material is disposed or transferred to DLA.

c. Provide accessible facilities to receive and store infectious waste per applicable Federal, State, local, or SOFA regulations until disposal of the materials.

d. Provide for disposal of infectious waste per applicable Federal, State, local, or SOFA regulations.

e. Manage infectious wastes in foreign countries to assure protection of human health and the environment as well as meet any applicable SOFA requirements.

12-6.9 Fleet CINCs and type commanders, as appropriate, shall:

a. Reimburse Navy shore activities receiving ship's used/excess HM and solid waste for expenses incurred for laboratory analysis, HW handling, storing, and disposal.

b. Reimburse Navy shore activities receiving ships' infectious waste for expenses incurred in handling, storing and disposing of the material.

CHAPTER 16

STORAGE TANKS

16-1 Scope

This chapter provides information and guidance applicable to the regulation of storage tanks (STs). This includes both underground storage tanks (USTs) and aboveground storage tanks (ASTs). It includes those containing petroleum products and/or hazardous substances (HS) at Navy shore facilities within the United States, the Commonwealth of Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands. Chapter 18 describes responsibilities and requirements pertaining to Navy installations in foreign countries. The Spill Prevention Control and Countermeasure requirements described in chapter 9 also give guidance on governing petroleum STs.

16-1.1 References:

a. 40 CFR 112, EPA Regulations on Oil Pollution Prevention;

b. 40 CFR 280, EPA Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks;

c. 40 CFR 110, EPA Regulations on Discharge of Oil;

d. OPNAVINST 5100.23E, Navy Occupational Safety and Health (NAVOSH) Program Manual;

16-2 Legislation

16-2.1 Clean Water Act (CWA). The goal of the CWA is to protect the surface waters of the United States. Under the CWA, EPA published oil pollution prevention regulations in 1973. These regulations, contained in reference (a), were amended in 1974 and again in 1976. The CWA prohibits the discharge of oil into surface waters, if the discharge violates applicable State standards, causes a sheen or film or discolors the surface of the water, or deposits sludge beneath the water's surface. The Federal Oil Pollution Prevention Regulations require the preparation of Spill Prevention Control and Countermeasures (SPCC) Plans and contain specific guidelines for the design and operation of petroleum STs (see chapter 9). The guidelines for oil storage tanks in reference (a) include requirements for secondary containment, control of storm water drainage from containment areas, corrosion protection of buried metallic tanks and piping, inspection and testing of aboveground tanks, testing of underground tanks and pipelines, requirements for spill prevention devices such as high level alarms, security requirements for oil storage areas, and personnel training requirements. In 1991, the EPA proposed extensive revisions to reference (a), to be implemented in two phases. As of November 1998, the Phase I revisions were still not final. However, the Phase II revisions, which included the requirement for facility specific contingency plans, went into effect on 30 August 1994.

16-2.2 Hazardous and Solid Waste Amendments (HSWA). HSWA extended and strengthened the provisions of the Solid Waste Disposal Act (SWDA) as amended by the Resource Conservation and Recovery Act (RCRA). One major portion, Subtitle I, provides for the development and implementation of a comprehensive regulatory program for USTs containing "regulated substances" and releases of these substances to the environment. HSWA requires that Federal facilities comply with all Federal, State, and local requirements regarding USTs, including payment of registration fees or permit fees when such fees are not taxes. Federal

regulations outline procedures by which EPA may approve State programs to operate in place of the Federal UST requirements if those State programs have standards that are no less stringent than the Federal requirements and provide for adequate enforcement of compliance with those standards. States with approved UST programs or Memoranda of Understanding (MOUs) with the EPA will have primary enforcement responsibility regarding UST program requirements in their States. Currently most States have a UST regulatory program in place. After EPA approves the State program, facilities must comply with all applicable provisions of the State UST programs.

16-3 Terms and Definitions

16-3.1 ASTs. All tanks and attached piping containing regulated substances in which greater than 90 percent of the tank volume (including piping) is above the surface of the ground.

16-3.2 Petroleum. Petroleum, including crude oil or any fraction thereof, that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

16-3.3 Regulated Substance. Any hazardous substances (HS) regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), excluding any substances regulated as hazardous waste (HW) under Subtitle C of RCRA, and petroleum substances including crude oil, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

16-3.4 Release. Any spilling, leaking, emitting, discharging, escaping, leaching, or disposing of hazardous substances or petroleum from an ST into ground water, surface water, or subsurface soils.

16-3.5 Storage Tanks (STs). All STs (both above and underground), containing regulated substances.

16-3.6 Tank Management Plan. An operations and management document, for installation-level use, that stresses above and underground storage tank spill prevention, planning, regulatory compliance, and record keeping.

16-3.7 USTs

a. As defined in RCRA, Subchapter IX, section 6991, the term "underground storage tank" means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 percentum or more beneath the surface of the ground. Such term does not include any:

(1) Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes;

(2) Tanks used for storing heating oil for consumptive use on the premises where stored;

(3) Septic tanks;

(4) Pipeline facility (including gathering lines) regulated under The Natural Gas Pipeline Safety Act of 1968, The Hazardous Liquid Pipeline Safety Act of 1979, or an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in (1) or (2);

(5) Surface impoundment, pit, pond or lagoon;

(6) Storm water or waste water collection system;

(7) Flow-through process tank;

(8) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

(9) Storage tank situated in an underground area (such as a basement, cellar, mine, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term underground storage tank shall not include any pipes connected to any tank described above in paragraphs 16-3.7a(1) through (9).

b. In addition to the RCRA exclusions, the U.S. Environmental Protection Agency excluded the following underground ST systems from regulation under reference (b):

(1) Any UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, or mixture of such hazardous waste and other regulated substances;

(2) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 402 or 307(b) of the Clean Water Act;

(3) Equipment or machinery that contains regulated substances for operation purposes such as hydraulic lift tanks and electrical equipment tanks;

(4) Any UST system whose capacity is 110 gallons or less;

(5) Any UST system that contains a de minimis concentration of regulated substances;

(6) Any emergency spill or overflow containment UST system that is expeditiously emptied after use.

c. The above UST information concerns Federal statutes and regulations. State laws and regulations occasionally define UST systems differently than the Federal laws and regulations.

16-4 Requirements

16-4.1 General Operating Requirements

16-4.1.1 Installations with STs shall monitor transfer operations to ensure that spilling or overflowing does not occur. They will maintain overfill protection equipment in order to prevent releases.

16-4.1.2 Installations will maintain and inspect corrosion protection measures, including cathodic protection.

16-4.1.3 Installations will install new ST systems and make repairs to existing ST systems according to Federal, State, and local requirements.

16-4.1.4 The installation will also maintain written records demonstrating compliance with operational requirements.

16-4.2 Aboveground Storage Tanks

16-4.2.1 General Operating Requirements. (R Because of the limited waiver of Federal sovereign immunity in the UST statutory provisions, ASTs are not regulated by RCRA. Though they can, under certain limited circumstances, be regulated under the CWA statute, current Federal regulation is limited to the petroleum pollution prevention and discharge reporting requirements of references (a) and (c). Some States or local governments may have developed AST regulatory standards. However, such standards may or may not apply to the Navy because of these limitations in the UST and CWA statutes. Where the determination has been made that an AST can not properly be regulated under a

State's or local government's AST standards, installations shall apply best management practices to the daily operation of those ASTs.

16-4.2.2 Release Detection, Testing, and Inspection. Whenever possible, installations will install release detection systems on AST systems per references (a) and (c).

16-4.2.3 Release Reporting, Investigation, and Confirmation. Installations should report releases of petroleum or HS from ASTs according to the guidance in chapter 10. Installations will immediately investigate suspected releases from the underground portions of ASTs by integrity testing and/or by performing a subsurface investigation. If regulated substances are found in adjacent properties, then the EPA or State agency can require an installation to conduct a release investigation of suspect STs.

16-4.2.4 Out-of-Service ASTs and Closure. Installations will conduct permanent closure of ASTs per applicable State or local regulations. At a minimum, installations will empty and clean ASTs and associated pipelines. Installations will also cap, blank flange, and mark pipelines as to origin. Installation records will record conditions of the site, which may involve a site assessment.

16-4.3 Underground Storage Tanks

16-4.3.1 General Operating Requirements

16-4.3.1.1 Installations will protect all new UST systems from corrosion, equip them with spill/overfill prevention equipment combined with an approved method of release detection, and install per nationally recognized standards. New underground piping that conveys regulated substances must be properly designed, constructed, and protected from corrosion. Pressurized piping and some types of suction piping must also be provided with automatic leak detection and either annual tightness testing or monthly monitoring. Test repairs for tightness and maintain records of all repairs for at least 5 years.

16-4.3.1.2 Installations had to replace or upgrade existing USTs as regulated by Federal, State, or local regulations, to meet corrosion protection and spill/overfill prevention standards before 22 December 1998 or per applicable Navy/State agreement. Installations must replace or upgrade existing USTs that are either exempt or deferred from the UST regulations if possible, particularly those USTs located in environmentally sensitive areas. They will upgrade existing USTs by the addition of secondary containment, spill/overfill prevention equipment, and corrosion protection as dictated by the installation's SPCC plan. Installations will upgrade or replace existing piping associated with tank systems to meet corrosion protection requirements.

16-4.3.1.3 All new and existing HS USTs and associated underground piping had to have secondary containment by 22 December 1998 or per applicable Navy/State agreement.

16-4.3.2 Release Detection, Testing, and Inspections. Any UST system that stores fuel solely for emergency power generators is exempt from regulatory release detection requirements.

16-4.3.2.1 Installations will install release detection systems on petroleum and HS UST systems as required by Federal, State, or local regulations. Installations will also install release detection systems on non-regulated USTs whenever possible.

16-4.3.2.2 The installation will maintain records demonstrating compliance with release detection requirements and with testing and inspection requirements.

16-4.3.3 Release Reporting, Investigation and Confirmation

16-4.3.3.1 The installation will report releases and suspected releases from USTs to the EPA or State agency within 24 hours of discovery. The installation will report HS releases and releases of petroleum or HS into surface waters from USTs according to the guidance in chapter 10.

16-4.3.3.2 **Installations** will immediately investigate suspected releases from USTs by integrity testing and/or by performing a subsurface investigation. If regulated substances are found in adjacent properties, then the EPA or State agency can require an installation to conduct a release investigation of suspect STs.

16-4.3.4 Release Response and Corrective Action for UST Systems Containing Regulated Substances

16-4.3.4.1 After reporting a confirmed release to either the EPA or State agency, the installation *must stop further release of the regulated* substance from the UST, and mitigate fire, explosion, and vapor hazards, by preventing any further release through the emptying of the UST system. The installation will take steps to prevent further migration of any aboveground or exposed below ground releases. *If the source of an* underground release is not known, conduct subsurface sampling in order to determine the source. Investigate the possible presence of free product and recover free product as soon as practicable. UST releases into surface waters require installations to take the response actions described in chapter 10 in addition to the requirements described in this section, pargraph 16-4.3.4.

16-4.3.4.2 UST releases require an initial abatement report, initial site characterization report, and free product recovery report to be submitted by the installation to the EPA or State agency within the time-frame specified by the agency. In addition, a release investigation report and/or corrective action plan will be submitted by the installation if requested or otherwise required by the EPA or State agency.

16-4.3.4.3 Installations will clean up soil and groundwater contamination resulting from UST releases per an approved corrective action plan or as otherwise authorized or requested by the EPA or State agency. Prior to any cleanup, the installation will notify the EPA or State agency of the installation's intent to begin cleanup.

16-4.3.4.4 Installations will remove free floating product to the maximum extent practicable.

16-4.3.5 Out-of-Service UST Systems and Closure

16-4.3.5.1 Installations will maintain corrosion protection systems during temporary closure of UST system even if the system is *empty. Continue to operate release detection* systems unless the system is emptied.

16-4.3.5.2 When temporarily closing USTs for 3 months or more, leave vent lines open and functioning and cap and secure all other lines, *pumps, manways, and ancillary equipment.*

16-4.3.5.3 Installations will permanently close USTs that do not meet the standards for new or upgraded UST systems within 12 months of temporary closure unless the EPA or State agency grants an extension.

16-4.3.5.4 Installations will notify the EPA or State agency at least 30 days in advance of UST permanent closure. For permanent closure, empty, clean, and either fill USTs with a solid inert material or remove them from the ground. The installation shall conduct a site assessment at the time of permanent closure unless an approved external release detection method was in use prior to closure. If contamination is encountered during closure, the installation will initiate corrective action.

16-4.3.5.5 Continued use of a regulated UST system to store a non-regulated substance is considered a change-in-service. A change-in-service requires that the installation empty and clean out the UST and that a site assessment be performed by the installation. Notify the EPA or State agency 30 days in advance of a change-in-service.

16-4.3.5.6 The EPA or State agency can require investigation and cleanup of USTs that were permanently closed prior to 22 December 1988 if the UST site poses a threat to human health or the environment.

16-4.3.5.7 Installations will retain a permanent closure, site assessment, site characterization, and corrective action records for at least 50 years to protect the Navy from potential future liability.

16-5 Navy Policy

R) **16-5.1** The Navy's AST Program policy is to comply with all applicable Federal, State, and local regulations pertaining to the management of ASTs. However, because of the limited waiver of Federal sovereign immunity to the regulation of ASTs (e.g., the requirement that the AST could have an impact on "navigable water of the U.S." (see 40 CFR §. 112), legal counsel should be contacted if there are any questions concerning compliance with state or local AST regulations.

16-5.2 Whenever possible, the Navy shall replace older, unprotected steel tanks with state-of-the-art ASTs or state-of-the-art double-walled USTs with continuous interstitial monitoring.

The Navy's preferred method of UST system closure is by removal. Installations shall leave a UST system in the ground and fill it with an inert material only when extenuating circumstances preclude the removal of a UST system.

16-5.3 Navy installations with STs shall have a tank management plan containing the following information:

a. Listing of all STs at the installation.

b. For USTs, the regulatory requirements for each.

c. A plan of action for achieving and maintaining compliance through monitoring, removal, repair, retrofit, replacement, and remediation of regulated ST systems.

Installations should include in the ST management plan all STs that have the potential to cause environmental damages and/or health hazards regardless of whether the ST is included in existing regulations. For example, include a currently exempt UST, such as a UST that stores heating oil, in the UST management plan if a release from the UST has the potential to cause environmental problems such as groundwater contamination. Installations should also include in the plan non-regulated ASTs that are likely to be included in future Federal, State, or local regulations.

16-5.4 Training. Commanders of shore installations shall ensure that all personnel involved in design, construction, installation, management and operation of storage tanks, receive appropriate storage tank training. They shall include the following topics in this training as applicable: corrosion protection measures, compliance records, release detection, reporting investigation and confirmation, corrective action plans, closure, site assessment, Federal, State, and local regulations pertaining to STs, monitoring, removal, repair, retrofit, replacement, remediation, leak detection and product inventory requirements, record keeping, and operation of monitoring systems.

16-6 Responsibilities

16-6.1 COMNAVFACENGCOM shall

a. Assist Navy installations in the preparation of ST Management Plans and Environmental Program Requirements (EPR) Reports.

b. Provide technical advice and assistance to Navy installations for leak detection services.

c. Revise technical directives and design manuals to reflect regulatory requirements for new construction of STs, including underground piping and leak detection devices.

d. Provide assistance to major commands and their installations for estimation of resource requirements.

e. Provide funding and execution of ST corrective actions that qualify for Environmental Restoration, Navy ER,N funding, and are within current priorities.

f. Ensure funding is available to train engineering field division (EFD) environmental engineers, environmental planners, environmental protection specialists and other personnel involved with STs.

16-6.2 COMNAVSUPSYSCOM shall provide technical input and assistance to COMNAVFACENGCOM concerning leak detection, construction of new STs, and the disposition of petroleum recovered during site restoration.

16-6.3 Major claimants and subordinate commands shall include requests for resources to meet ST compliance requirements in Program Objective Memorandum (POM)/budget submittals.

16-6.4 Commanding officers of shore installations shall

a. Assemble and collate ST data including storage tank volume, type, installation date, and tank contents for achieving and maintaining compliance with all applicable Federal, State, and local laws and regulations.

b. Ensure that notification forms are completed for regulated STs and forward the notification to the appropriate State agency. (D

c. Prepare and maintain ST Management Plans, with assistance from COMNAVFACENGCOM, to document a plan of action for achieving and maintaining compliance with all applicable Federal, State, and local laws and regulations. The plan shall include or reference compliance records demonstrating storage tank inspection/testing of corrosion protection system, release detection system, secondary containment systems, spill and overflow controls, repair documentation, site investigation results, and closure.

d. Accomplish leak detection and product inventory requirements, record keeping and operation of monitoring systems required by Federal, State, and local ST laws and regulations.

e. Fund the installation of tank leak detection and monitoring systems required by local, State, and Federal regulatory agencies.

f. Budget sufficient resources to replace or repair STs as required by applicable Federal, State, and local laws and regulations or by best management practices.

g. Comply with applicable Federal, State, and local laws and regulations concerning the construction of new ST systems.

h. Prepare EPR and required POM exhibits for all compliance mandated ST projects and Navy policy storage tank projects.

i. Ensure that actions involving upgrading, removing and replacing tanks comply with health and safety requirements per reference (d). Whether government personnel or contractors remove the tanks, they shall plan and conduct associated activities to preclude injury to personnel and accidental damage to the environment.

CHAPTER 18

OVERSEAS ENVIRONMENTAL COMPLIANCE ASHORE

18-1 Scope

This chapter provides environmental guidance for Navy installations outside the United States (U.S.) its territories and possessions, but not to ships, aircraft, and operational and training deployments outside the U.S. Specifically, this chapter does not apply to:

a. U.S. military ship and aircraft operations governed by other DOD policies and directives and applicable international agreements.

b. Facilities and activities covered under Executive Order (EO) 12344, Naval Nuclear Propulsion Program, and conducted under 42 U.S.C. 7158.

c. Facilities located in Antarctica.

Since this chapter applies only to overseas installations, the format is different than the majority of the remaining chapters. Each section covers the appropriate legislation, requirements, policy, and training while the Navy policy subsection is divided by environmental media. Responsibilities are summarized by command at the end of the chapter.

18-1.1 References

a. Final Governing Standards (FGSs) as developed by Executive Agents for each country with significant DOD installations (NOTAL), (https://www.denix.osd.mil/denix/DOD/Library/Intl/FGS/final-gov-stds-DOD.html).

b. DOD Instruction 4715.5 Management of Environmental Compliance at Overseas Installations, 22 April 1996, (http://www.dtic. mil/whs/directives/);

c. DOD Overseas Environmental Baseline Guidance Document (OEBGD), DOD Publication 4715.5-G, of 15 March 2000; (NOTAL), (https://www.denix.osd.mil/denix/Public/Library/Intl/OEBGD/oebgd.html);

d. SECNAVINST 5510.30A Department of Navy Security Program, 10 March 1999, (http://neds.nebt.daps.mil/);

e. SECNAVINST 5510.36 Department of Navy (DON) Information Security Program (ISP) Regulation, 17 March 1999, (http://neds.nebt.daps.mil/);

f. OPNAVINST 5510.155C, Classified Supplement to the Manual for Disclosure of Classified Military Information to Foreign Governments and International Organizations, (NOTAL);

g. DOD Instruction 4715.8 Environmental Remediation for DOD Activities Overseas, 2 February 1998, (http://www.dtic.mil/whs/ directives/).

18-2 Legislation

18-2.1 National Historic Preservation Act (NHPA). With respect to overseas activities, the NHPA requires Federal agencies undertaking actions that may directly and adversely affect property on the World Heritage List or the applicable country's equivalent of the National Register to consider the effect and try to avoid or mitigate any adverse effects.

18-2.2 Toxic Substances Control Act (TSCA). Provides for the Federal regulation of the manufacture, use, distribution in commerce, and disposal of chemical substances that present a hazard to health or the environment. Overseas installations that export from or import to the U.S. may be subject to TSCA Sections 12 and 13. DOD dependents' schools overseas are subject to the asbestos hazard emergency response requirements in TSCA Subchapter II. Section 12 contains export notification obligations, and export exemptions. Section 13 discusses importer regulations, definitions, and exclusions.

18-3 Terms and Definitions

18-3.1 Environment. The natural and physical environment. It excludes social, economic and/or other environments.

18-3.2 Executive Agent (EA). A military service, military command or sub-unified command designated by the Deputy Under Secretary of Defense for Environmental Security (DUSD(ES)) after receiving the recommendations from the Joint Chiefs of Staff (JCOS) and coordinating with the Military Departments. Establishes reference (a) for DOD installations within its geographic area of responsibility. The EA consults with host nation authorities on environmental issues of concern to the DOD components. The following is a list of EAs for different countries:

COMMAND	COUNTRY
CINCUSNAVEUR	Spain, Italy, Greece
CINCLANTFLT	Iceland, Bermuda, Caribbean (including Cuba), and all other Atlantic locations)
CINCPACFLT	Diego Garcia
U.S. Forces Japan	Japan
U.S. Forces Korea	Korea
CINCUSAFE	United Kingdom, Turkey
USAF Space Command	Ascension Islands, Greenland
USAF Air Mobility Command	Azores
CINCAREUR	Germany, Belgium, Netherlands

CINCARSO	Panama and all other countries in U.S. Southern Command
CINCCENT	All countries in area of responsibility (AOR), including Egypt and Bahrain

EAs establish reference (a) for DOD installations within their region under reference (b).

18-3.3 Final Governing Standards (FGS). Country-specific substantive provisions, typically technical limitations on effluent, discharges, etc., or specific management practices with which installations must comply. Reference (a) are derived from reference (c), host nation substantive pollution control laws of general applicability, applicable treaties and U.S. law with extraterritorial application.

18-3.4 Foreign Nation. A geographic area (land, water, and airspace) that is under the territorial jurisdiction of a foreign government or that is under military occupation by the U.S. alone or jointly with any other foreign government.

18-3.5 Overseas Environmental Baseline Guidance Document. A current compendium of criteria, based on consideration of laws generally applicable to similarity-situated DOD installations within the U.S., that is designated to protect the environment at DOD installations outside U.S. territory.

18-3.6 United States. All States, territories, and possessions of the U.S. and all waters and airspace subject to the territorial jurisdiction of the U.S.

18-4 Requirements

Navy shore activities in foreign nations will comply with applicable reference (a). Where reference (a) has not been issued, Navy shore activities will comply with reference (c), host nation substantive pollution control laws of general applicability (as required by EO 12088), U.S. law with extraterritorial effect and applicable treaties (including the SOFA).

18-5 Navy Policy

18-5.1 Fixed Facilities Provided by the U.S. and Operated by the Navy. In nations where there is a reference (a), all Navy facilities and operations shall comply with reference (a). Where reference (a) have not been issued, Navy shore activities will comply with reference (c), host nation substantive pollution control laws of general applicability (as required by EO 12088), U.S. law with extraterritorial effect and applicable treaties (including the SOFA).

18-5.2 Funding of Capital Improvements for Environmental Compliance at Overseas Installations. When capital improvements are required at overseas installations to comply with either the reference (a) or reference (c) and EO 12088, as applicable, funding decisions shall be based on a number of considerations including which country provided the facilities in question and provisions of the pertinent Status of Forces Agreement (SOFA). Navy policy is that unless otherwise provided in the pertinent SOFA, the host nation is expected to fund environmental compliance projects at facilities that the host nation provides. After consultation or negotiation with the host nation, funding questions may be resolved in a number of ways including the following:

a. Pollution abatement improvements may be accomplished as a result of inclusion in bilateral or multilateral negotiations on programs not directly involving environmental compliance.

b. In some cases host country provided facilities have been significantly modified by the U.S. to meet operational requirements. When capital improvements are required to meet the environmental standards of general applicability in the host country or jurisdiction, the Navy may negotiate shared contributions for such improvements. It may be done, after consultation with the ambassador, when it is in the best interest of the Navy and does not establish a precedent. The contribution should normally be no more than the proportion of modification attributable to the U.S. Project funding request documents shall indicate the results of negotiations to include the basis for determination of the U.S. share.

c. If the host country declines to provide funds for required capital improvements or if negotiations with the host country for shared contributions are unsuccessful, the Navy may, when in the best interests of the Navy and without establishment of precedent, program for required pollution control capital improvement projects. Project funding request documents shall indicate the circumstances under which the projects are submitted.

18-5.3 Facility Visits and Inspections. Federal law and EOs on information and physical security matters, as implemented in Navy regulations and the SOFA, shall govern access of host country environmental officials to U.S. controlled fixed facilities.

a. **Sovereign Immunity Policy**. U.S. military aircraft, warships, and auxiliaries (including USNS vessels and afloat prepositioned force ships) enjoy sovereign immunity from interference by foreign governmental authorities. Foreign officials shall not be allowed access to military aircraft, warships, or auxiliaries for purposes of environmental inspections or examination. Commanding Officers, Masters, and Aircraft Commanders may certify compliance with host country environmental requirements, certification may include a general description of measures taken to comply with environmental requirements. At the discretion of the Commanding Officer, Master, or Aircraft Commander, foreign authorities may be received on board for purpose of accepting certification of compliance, but under no circumstances may they be permitted to exercise governmental authority, nor may they inspect the military aircraft, warships or auxiliaries or act as an observer while U.S. personnel conduct such inspections.

b. Installation and regional commanders shall consult with the Environmental EA for the host nation, or with the commander in chief (CINC) where no EA has been appointed, to pre-establish procedures for access by host nation officials. Procedures shall comply with the applicable SOFA and established practices implementing the SOFA. Installation commanders shall comply with access procedures so established.

c. Where host nation officials request access in addition to those established through the CINC, the installation commander shall immediately notify the Navy component commander in theater, the environmental EA (if applicable) and CNO (N4). The notice shall include the identity of the host nation authority needing access, the extent to which the host nation authority requesting access is delegated national authority for pollution control, the extent of access requested, the date for which access is requested, an explanation why established access procedures (if applicable) are insufficient, the extent to which granting the request would establish precedent and the commander's recommendation whether providing access would be in the best interest of the U.S. Unless otherwise directed, the installation commander may permit access after completing consultation with the environmental EA, component commander and CNO (N4) or 3 working days after providing notification, whichever is earlier. If access is denied, the installation commander shall notify the same parties and shall ensure that the Chief of Mission with the U.S. ambassador to

the country has been notified as well.

d. Access by foreign officials to propulsion plant spaces of nuclear powered ships, or to naval nuclear propulsion information is governed by reference (f) and is not authorized without approval by CNO (N00N).

18-5.4 Mobile Sources. Military vessels, aircraft, and vehicles that are operated in a host country and manufactured in the U.S. shall be designed to comply with applicable U.S. or international environmental standards. Reference (a) shall govern the operation and maintenance of mobile sources, other than vessels and aircraft, that are based in a host country where such provisions have been issued. If no reference (a) have been issued, the operation and maintenance of mobile sources, other than aircraft and vessels, based in the host country, shall be governed by applicable provisions of the SOFA, reference (c) and EO 12088. In particular, EO 12088 requires compliance with substantive host nation pollution control laws of general applicability. In most instances, these shall be the pollution control standards observed by the host nation's military forces for similar vehicles. Except for sovereign immune vessels and aircraft and unless otherwise provided in the SOFA, transient mobile sources or those sources temporarily within a foreign jurisdiction are subject to that country's standards for the terms and conditions set forth in the clearance for the visit. Although not subject to enforcement by the host nation, sovereign immune vessels and aircraft shall operate under the environmental protection provisions of their visit clearance. Where no specific environmental protection provisions are included in the visit clearance, sovereign immune vessels and aircraft shall comply with the environmental protection standards used by the host nation's military forces to the extent practical.

18-5.5 If an installation commander believes that compliance with a particular reference (a) would seriously impair the installation's operation, adversely affect relations with the host nation or require substantial expenditure of funds not available for such purpose, he or she may request that the DON, through the chain of command, ask the EA to waive or authorize deviation from the particular standards or guidelines under the procedures set out in reference (c) and (a). Navy policy is to minimize requests for waivers and to limit the duration of waivers where requested. Requests for waivers are appropriate, for example, where the cost of the project to achieve compliance at a base slated for closure is grossly disproportionate to the period during which environmental benefits would be derived from the project. Where this instruction or instructions by Navy component commanders require measure that are more protective the applicable reference (a), installation commanders shall request a waiver from the EA before requesting funding for the project.

18-5.6 National Environmental Policy Act (NEPA). NEPA does not apply overseas; however, EO 12144 addresses environmental effects abroad of major Federal actions. See Appendix E.

18-5.7 Pollution Prevention Ashore. EO 13148 directs all Federal agencies to comply with the Pollution Prevention Act of 1990. This EO applies to Federal facilities in the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. As a matter of policy, Navy activities outside of these areas are encouraged to make best efforts to comply with the goals of this order. Navy activities shall prepare pollution prevention plans as outlined in Chapter 3.

18-5.8 Emergency Planning and Community Right to Know Act. EO 13148 directs all Federal agencies to comply with the Emergency Planning and Community Right to Know Act of 1986. This EO applies to Federal facilities in any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction. As a matter of policy, Navy

activities outside of these areas are encouraged to make best efforts to comply with the goals of this order.

18-5.9 Clean Air Ashore. Navy activities shall manage their air programs under reference (a). In addition, activities shall encourage the use of unleaded fuels.

18-5.10 Ozone Depleting Substances (ODS). Navy activities shall manage their ODS as directed in Chapter 6 and reference (a).

18-5.11 Water Programs Ashore. Navy activities shall manage their water programs under reference (a).

18-5.12 Drinking Water Systems and Water Conservation. Navy activities shall manage their drinking water under reference (a) and shall monitor for lead in priority areas as specified in Paragraph 8-5.2.4.

18-5.13 Oil Management. Navy activities shall manage their oily wastes and waste oils under reference (a).

18-5.14 Oil and Hazardous Substances (OHS) Contingency Planning. Navy activities shall manage OHS planning under reference (a).

18-5.15 Polychlorinated Biphenyls (PCB) Management Ashore. Navy activities shall manage their PCBs under reference (a).

18-5.16 Hazardous Waste (HW) Management Ashore. Navy activities shall manage their HW under reference (a).

18-5.17 Pesticide Compliance Ashore. Navy activities shall manage their pesticides under reference (a). Activities that are responsible for pesticide application shall develop pest management plans and ensure that the program addresses pesticide applicator certification and re-certification training, pesticide storage, handing and disposal practices, and pest management operations record-keeping and reporting.

18-5.18 Solid Waste Management and Resource Recovery Ashore. Navy activities shall ensure compliance with solid waste standards under reference (a).

18-5.19 Cleanup and Restoration. The Installation Restoration (IR) program is limited to the U.S., its territories, and possessions, and does not apply to foreign countries. However, past DOD activities have caused the need for environmental cleanup and restoration. International agreements, SOFA, and U.S. government policy shall be used to decide whether cleanup action should be coordinated with the EA in accordance with reference (g).

18-5.20 Storage Tanks. Navy activities shall manage their above and underground storage tanks under reference (a).

18-5.21 Noise Prevention Ashore. Navy activities shall ensure compliance with the noise abatement measures of reference (a).

18-5.22 Environmental Quality Assessment (EQA) Ashore. Overseas installations shall use environmental audit checklists developed from reference (a). Prior to the establishment of reference (a), the installation shall use reference (c) and the Environmental Quality Assessment Guide to develop an appropriate program. Navy components delegated authority to act as EAs shall develop environmental audit checklists for the nations for which they are responsible.

18-5.23 Natural Resources Management. Navy activities shall program and budget for compliance and ensure compliance with reference (a).

18-5.24 Historic and Archeological Resources Protection. Navy activities shall ensure compliance with the historic and archeological resources of reference (a).

18-5.25 Training. Navy activities shall comply with the training measures outlined in Chapter 24 of this instruction. In addition, Navy components delegated authority to act as EAs shall carry out the training responsibilities established by reference (a) within the host nations for which they are responsible.

18-6 Responsibilities

18-6.1 CNO (N45) shall ensure major claimants allocate the resources required to achieve and maintain compliance with reference (c) and/or (a).

18-6.2 Major claimants and subordinate commands shall:

a. Ensure compliance with reference (c) and/or (a) established by the EA.

b. Conduct environmental quality assessments at overseas installations in accordance with reference (c) and/or (a).

c. Program and budget for environmental compliance projects.

d. Ensure that contracts for services or construction, where performance takes place at an overseas activity, and DOD contracts for the disposal of HW, include provisions requiring a contractor to comply with reference (c) and/or (a). The major claimant shall also ensure that contracts are administered to enforce such compliance.

e. Ensure host-tenant agreements address compliance with reference (c) and/or (a).

f. Communicate with EAs on environmental issues.

g. Endorse activity waiver requests from reference (c) and/or (a).

18-6.3 Commanding officers of overseas shore activities shall:

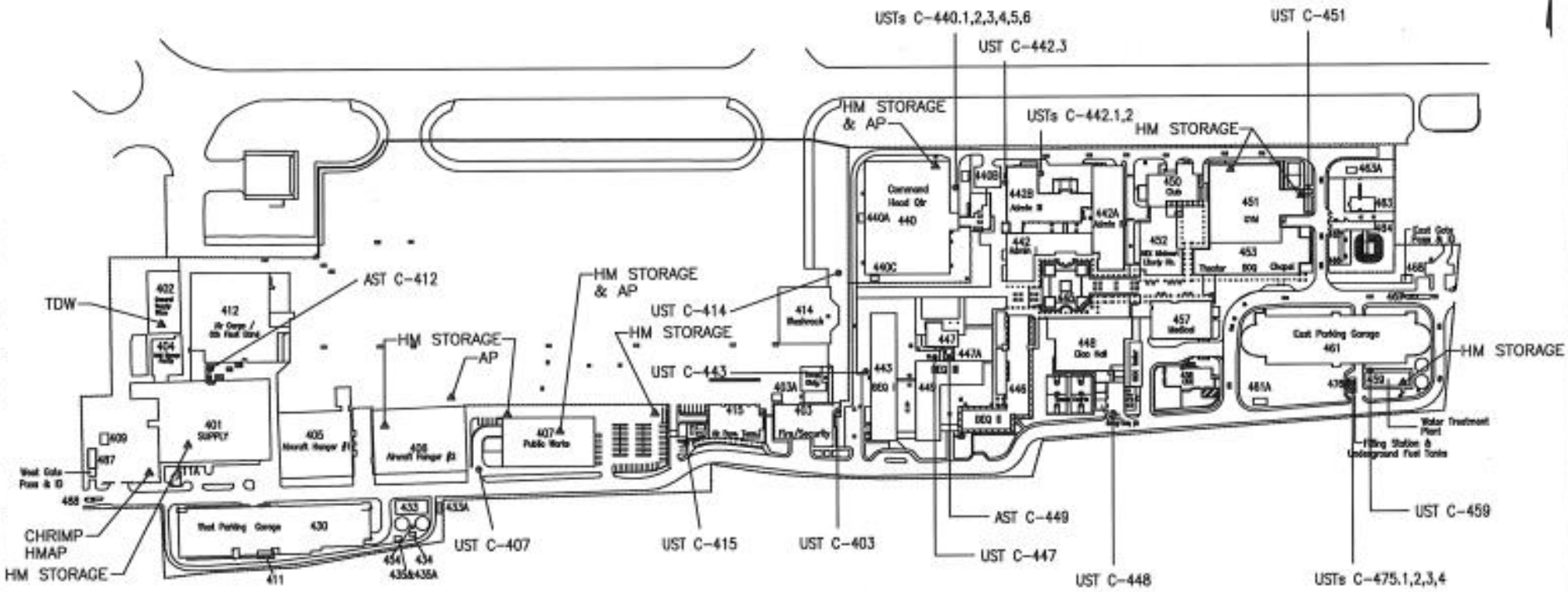
a. Comply with reference (c) and/or (a).

b. Develop and conduct training/education programs to instruct required personnel in the environmental aspects of their job.

c. Perform and document internal installation environmental quality assessments (EQAs) annually. The purpose of the internal EQA is to determine the overall compliance assessment status of the installation.

d. Communicate following the Navy chain of command with the Navy Regional Commander if present or the EA on environmental issues.

NSA Naples Capodichino



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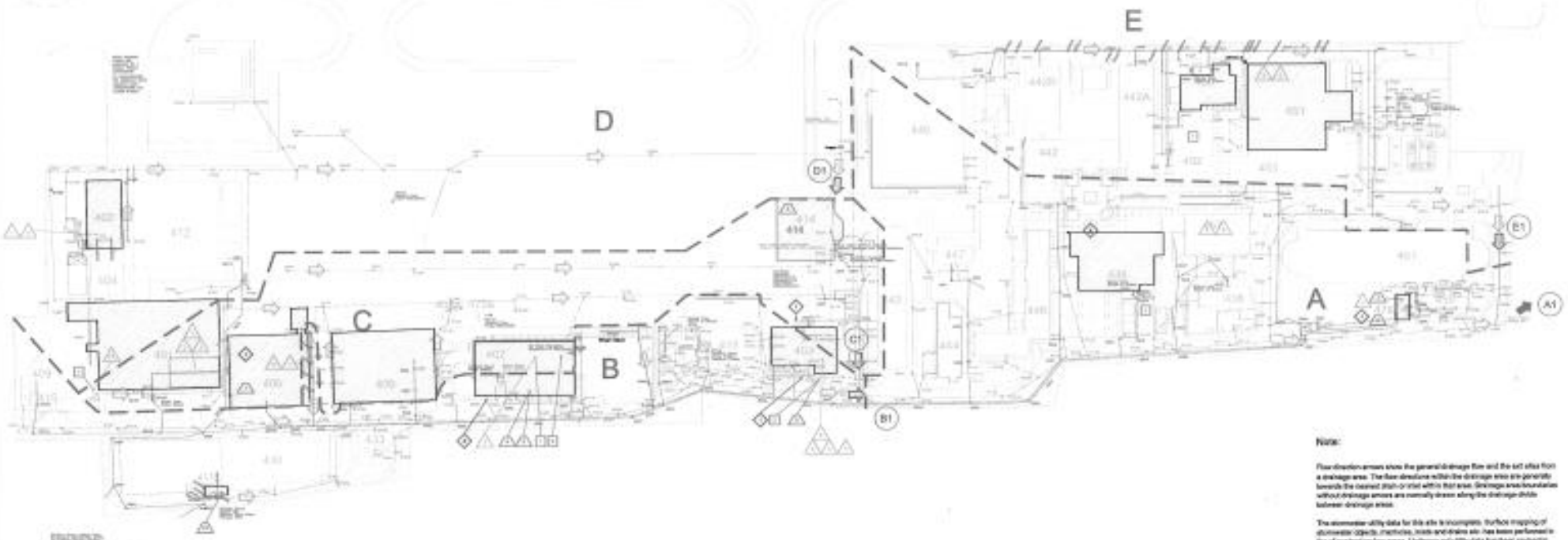
CAPODICHINO SITE
PST AND HM STORAGE LOCATION MAP
2008 SPCR PLAN
NSA NAPLES, ITALY



Note:

Flow direction arrows show the general drainage flow and the exit sites from a drainage area. The flow directions within the drainage area are generally towards the nearest drain or inlet within that area. Drainage area boundaries without drainage arrows are normally drawn along the drainage divide between drainage areas.

The stormwater utility data for this site is incomplete. Surface mapping of stormwater objects, manholes, inlets and drains etc. has been performed in the of nonlead-related areas. Underground utility data has been received in these areas where possible.

Note:

La direzione generale di deflusso e il punto di scarico delle acque reflue sono indicati con frecce per ogni area di drainaggio. La direzione di deflusso all'interno dell'area di drainaggio generalmente è verso la tubazione o il punto di scarico più vicino. I limiti di un'area di drainaggio sono normalmente indicati con linee senza freccia lungo il limite tra aree di drainaggio confinanti.

Le indicazioni circa la struttura fognaria (acque reflue) sono incomplete. Il rilievo delle strutture fognarie, pozzi d'ispezione, pozzetti, drenaggi, ecc. è stato eseguito nelle zone previste da contratto. Le indicazioni circa sotterranei sono state revisionate ove possibile.

Legend New Survey — Legenda Nuovo Rilievo

Numbering of Drop Inlet	Numerazione pozzetti
Numbering of Oil/Water Separator	Numerazione separatore acque – olio
Numbering of Trench Drain Inlet	Numerazione griglie di drenaggio
Numbering of Sewer Manhole	Numerazione pozzetto fognario / passo d'uomo (acque nere)
Numbering of Stormwater Manhole	Numerazione pozzetto / passo d'uomo (acque reflue)
Numbering of Holding Tank	Numerazione serbatoio di ritenuta
Drop Inlet	Caditoia
Oil-Water-Separator	Separatore acque – olio
Holding Tank	Serbatoio di accumulo
Trench Drain Inlet	Drenaggio
Sewer Manhole	Pozzetto / passo d'uomo (acque nere)
Sewer Line	Linea fognaria (acque nere)
Stormwater Manhole	Pozzetto / passo d'uomo (acque reflue)
Stormwater Line	Linea fognaria (acque reflue)
Stormwater Discharge	Scarico acque reflue
Building Re-Mapped	Edificio nuova rilievo
Building Inspected	Edificio ispezionato
Site Stormwater Outfall	Scarico finale da sito (acque reflue)
Drainage Area Outfall	Scarico area di drenaggio
Drainage Area	Area di drenaggio
Numbering of Drainage Area Outfall	Numerazione punto di scarico area di drenaggio
Numbering of Drainage Area	Numerazione area di drenaggio
Water Culvert	Pozzo sperdo

Legend Existing Structures — Legenda Strutture Esistenti

Numbering of Stormwater Manhole	Numerazione pozzetti / passo d'uomo (acque reflue)
Drop Inlet	Caditoia
Stormwater Manhole	Pozzetto / passo d'uomo (acque reflue)
Sewer Manhole	Pozzetto / passo d'uomo (acque nere)
Manhole with Pump	Pozzetto con pompa di rilancio
Grease Trap	Separatore grassi
Septic Tank	Serbatoio acque nere
Stormwater Line	Linea fognaria (acque reflue)
Sewer Line	Linea fognaria (acque nere)
Flow Direction in Stormwater Line	Direzione flusso in linea fognaria

Industrial Activity — Attività industriale

Aircraft Ground Support Equipment Maintenance	Manutenzione equipaggiamento ausiliario aeromobili
Aircraft / runway deicing	Disgelo aerei / piste
Aircraft / vehicle fueling operations	Rifornimento velivoli / veicoli
Aircraft / vehicle maintenance & repair	Manutenzione e riparazione aeromobili / veicoli
Aircraft / vehicle washing	Lavaggio velivoli / veicoli
Bulk fuel storage areas	Area di stoccaggio carburanti
Construction activities	Attività di costruzione
Corrosion control activities	Attività antiruggine corrosione
Outdoor painting / depainting operations	Verniciatura all' aperto
Power production	Produzione energia

Chemical Application areas — Aree uso chemicals

Pesticide operations	Pesticidi

Material Storage Areas — Aree stoccaggio materiali

Outdoor material storage areas	Stoccaggi materiali all' aperto
Vehicle storage	Stoccaggio veicoli

Hazardous material storage — Aree stoccaggio materiali pericolosi

Flammable	Infiammabile
Corrosives / Acids	Corrosivi / Acidi
Lubricants	Lubrificanti
Solvents	Solventi
Oil	Olio
Detergents	Detersivi
Biohazardous materials	Materiali particolarmi biologici
Pesticides	Pesticidi
Ethylene glycol / antifreeze	Glicole d'etilene / antigelo
Diesel	Gasolio
UST diesel	UST Gasolio
Compressed gas cylinders	Bombole gas
Cement asbestos panels	Tavole amianto
Ballasts	Ballasts
Fire extinguishers	Soffocatore antincendio
Others	altri

Leaks and Spills — Perdite

Oil / fuel	Olio / carburante
Corrosives / acids	Corrosivi / acidi
Solvents (anticorrosive)	Solventi (a vernice)
Detergents (and washwater)	Detersivi (ed acqua di lavaggio)

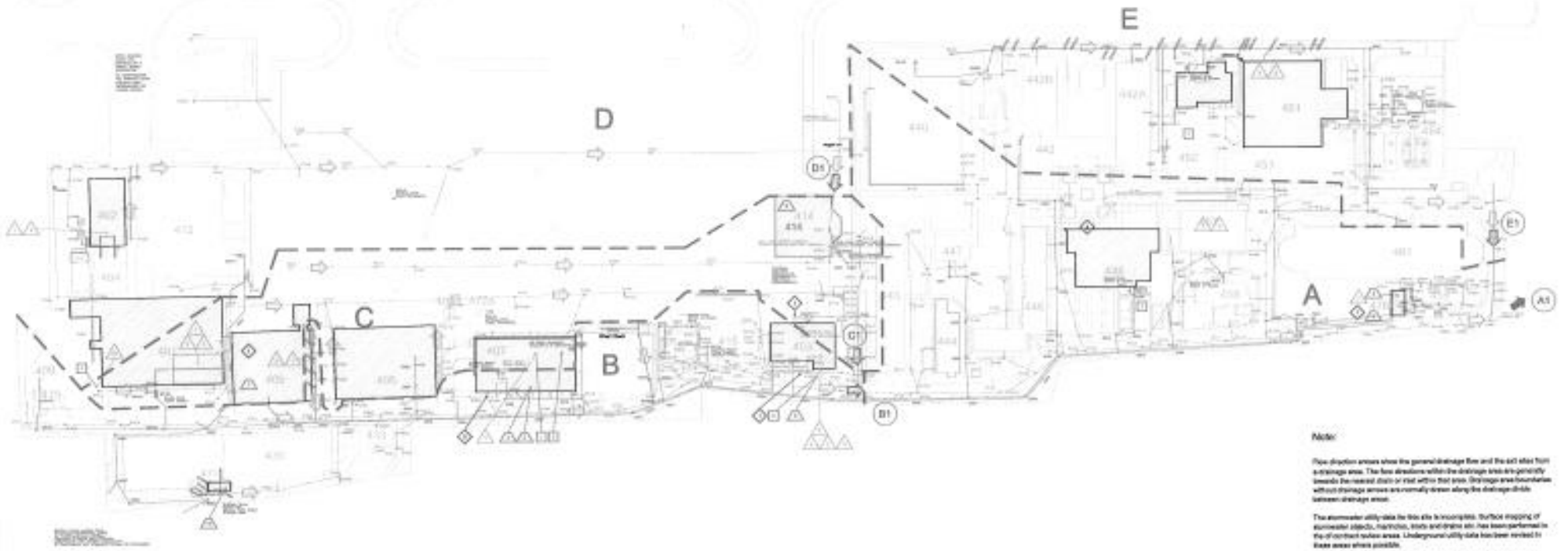
STORMWATER LAYOUT
LINEE FOGNARIE ISOLATE
CAPODICHINO
NAPLES, ITALY

NAVAL FACILITIES ENGINEERING COMMAND, ATLANTIC DIVISION FOR NAVAL SUPPORT ACTIVITY, NAPLES, ITALY

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

UBS

Date: 1/1999	Designed: N. Conti	Sheet No.: 1
Date: Apr. 2002	Drawn: A. Sutton	Scale: 1:1



Note:

Flow direction arrows show the general drainage flow and the exit sites from a drainage area. The flow directions within the drainage area are generally towards the nearest drain or inlet within that area. Drainage area boundaries without drainage arrows are normally drawn along the drainage divide between drainage areas.

The stormwater utility data for this site is incomplete. Surface mapping of stormwater objects, manholes, inlets and drains etc. has been performed in the off-northern section areas. Underground utility data has been revised in these areas where possible.

Nota:

La direzione generale di deflusso e il punto di uscita delle acque reflue sono indicate con frecce per ogni area di drenaggio. La direzione di deflusso all'interno dell'area di drenaggio generalmente è verso la bocca o il punto di scarico più vicino. I limiti di ciascun di drenaggio senza normalmente indicati sono linee senza frecce lungo la divisa tra aree di drenaggio confinanti.

La indicazioni circa la struttura fognaria (acque reflue) sono incomplete. È stata stata eseguita fognaria, pozzi d'uomo, pozzetti, drain etc. è stato eseguito nelle zone previste da contratto. Le ricognizioni circa i sottoservizi sono state rendimento non possibile.

Legend New Survey — Legenda Nuovo Rilievo

Numbering of Drop Inlet	Numerazione caditoia
Numbering of Oil Water Separator	Numerazione separatori acqua – olio
Numbering of Trench Drain inlet	Numerazione griglia di drenaggio
Numbering of Sewer Manhole	Numerazione pozzetto fognario / pozzo d'uomo (acque nere)
Numbering of Stormwater Manhole	Numerazione pozzetto / pozzo d'uomo (acque reflue)
Numbering of Holding Tank	Numerazione serbatoio di ritenuta
Drop Inlet	Caditoia
Oil Water Separator	Separatore acqua – olio
Holding Tank	Serbatoio di accumulo
Trench Drain inlet	Drenaggio
Sewer Manhole	Pozzetto / pozzo d'uomo (acque nere)
Sewer Line	Linea fognaria (acque nere)
Stormwater Manhole	Pozzetto / pozzo d'uomo (acque reflue)
Stormwater Line	Linea fognaria (acque reflue)
Stormwater Discharge	Scarico acque reflue
Building Re-Mapped	Edificio nuovo rilievo
Building Inspected	Edificio ispezionato
Site Stormwater Outfall	Scarico finale da sito (acque reflue)
Drainage Area Outfall	Scarico area di drenaggio
Drainage Area	Area di drenaggio
Numbering of Drainage Area Outfall	Numerazione punto di scarico area di drenaggio
Numbering of Drainage Area	Numerazione area di drenaggio
Water Culvert	Fognia sperta

Legend Existing Structures — Legenda Strutture Esistenti

Numbering of Stormwater Manhole	Numerazione pozzetto / pozzo d'uomo (acque reflue)
Drop Inlet	Caditoia
Stormwater Manhole	Pozzetto / pozzo d'uomo (acque reflue)
Sewer Manhole	Pozzetto / pozzo d'uomo (acque nere)
Manhole with Pump	Pozzetto con pompa di rilancio
Grease Trap	Separatore grassi
Septic Tank	Serbatoio acque nere
Stormwater Line	Linea fognaria (acque reflue)
Sewer Line	Linea fognaria (acque nere)
Flow Direction in Stormwater Line	Direzione flusso in linea fognaria

Industrial Activity — Attività industriale

Aircraft Ground Support Equipment Maintenance	Manutenzione equipaggiamento assistenza aeromobile
Aircraft / runway deicing	Disgelo aeri / piste
Aircraft / vehicle fueling operations	Rifornimento velivoli / veicoli
Aircraft / vehicle maintenance & repair	Manutenzione e riparazione aeromobili / veicoli
Aircraft / vehicle washing	Lavaggio velivoli / veicoli
Bulk fuel storage areas	Aree di stoccaggio carburanti
Construction activities	Attività di costruzione
Corrosion control activities	Attività controllo corrosione
Outdoor painting / depainting operations	Verniciatura all' aperto
Power production	Produzione energia

Chemical Application areas — Aree uso chemicals

Pesticide operations	Pesticidi

Material Storage Areas — Aree stoccaggio materiali

Outdoor material storage areas	Stoccaggi materiali all' aperto
Vehicle storage	Stoccaggio veicoli

Hazardous material storage — Aree stoccaggio materiali pericolosi

Flammable	Infiammabile
Corrosives / Acids	Corrosivi / Acidi
Lubricants	Lubrificanti
Solvents	Solventi
Oil	Olio
Detergents	Detergenti
Biohazardous materials	Materiali pericolosi biologici
Pesticides	Pesticidi
Ethylene glycol / antifreeze	Glicole di etilene / antigelo
Diesel	Gasolio
UST close	UST Cassata
Compressed gas cylinders	Bombole gas
Cement asbestos panels	Pannelli amianto
Batteries	Batterie
Fire extinguish them	Schiuma antincendio
Others	altri

Leaks and Spills — Perdite

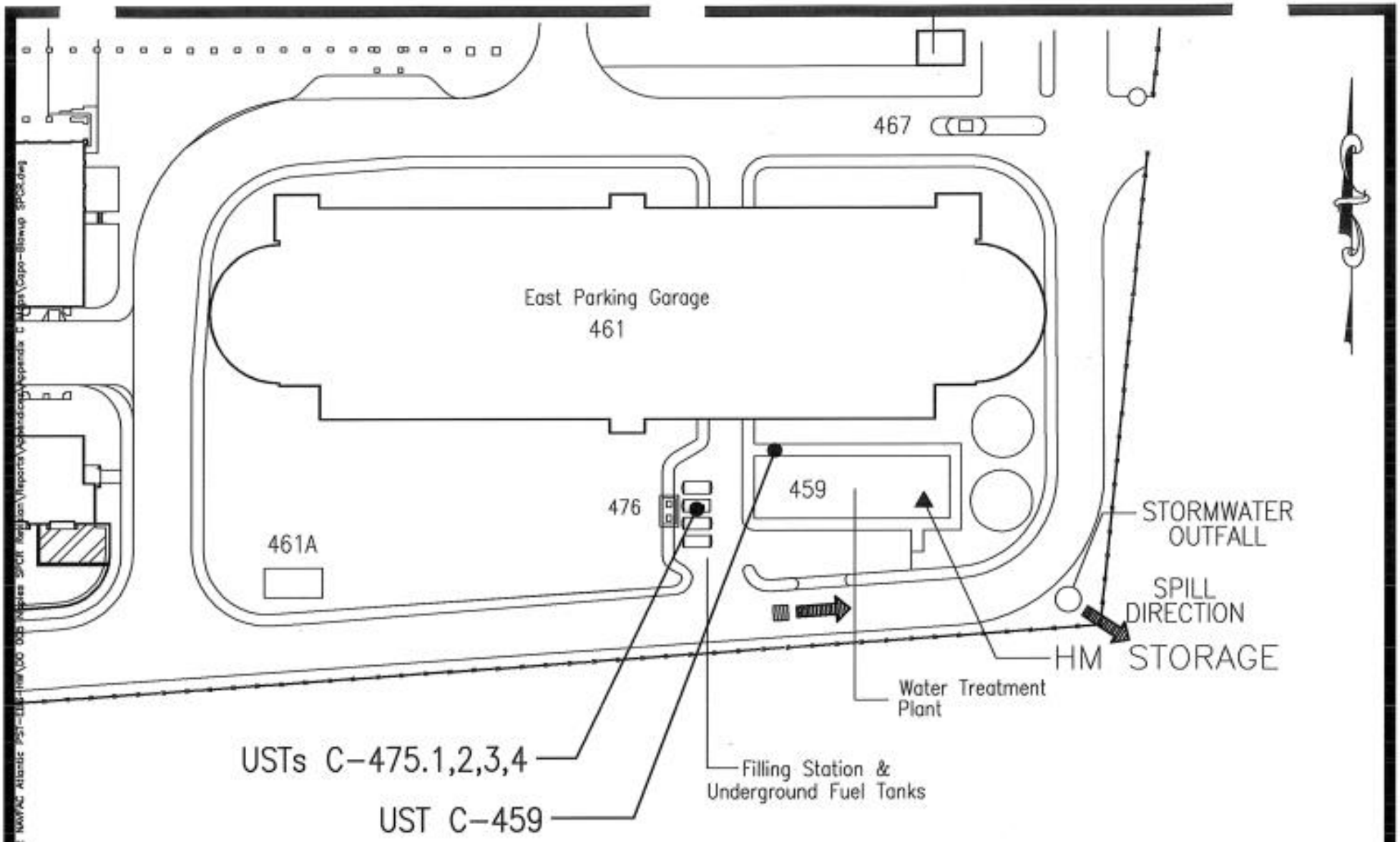
Oil / fuel	Olio / carburante
Corrosives / acids	Corrosivi / acidi
Solvents (and paints)	Solventi (e vernici)
Detergents (and wastewater)	Detersivi (ed acque di lavaggio)

N

Scale 1:1,000

0 10 20 30 40 50 100m

STORMWATER LAYOUT UNIT FOGNARIE BIANCHE CAPODICHINO NAPLES, ITALY	NAVAL FACILITIES ENGINEERING COMMAND, ATLANTIC DIVISION FOR NAVAL SUPPORT ACTIVITY, NAPLES, ITALY
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	URS



NSA Naples Capodichino

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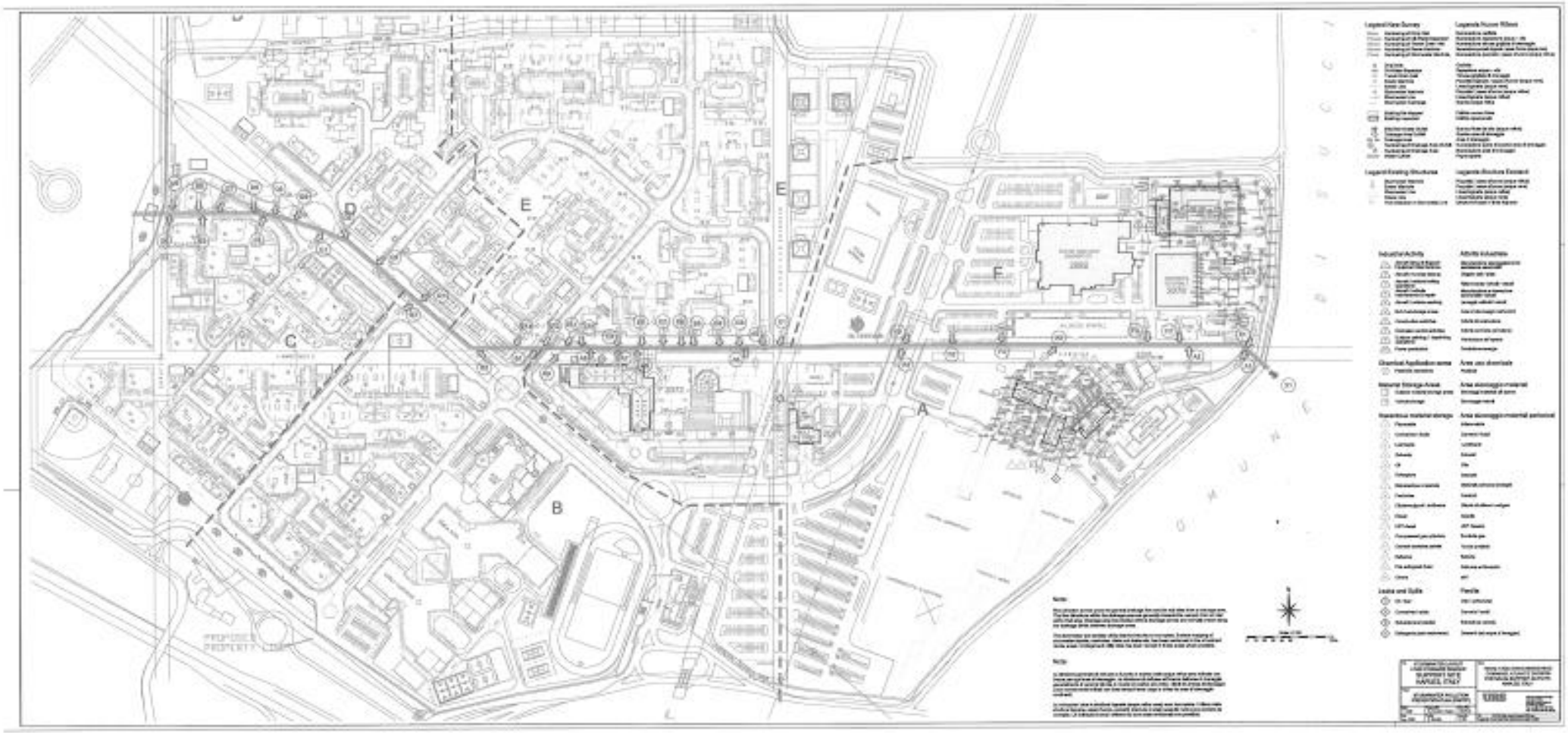
CAPODICHINO SITE
SPILL DIRECTION MAP
2008 SPCR PLAN
NSA NAPLES, ITALY



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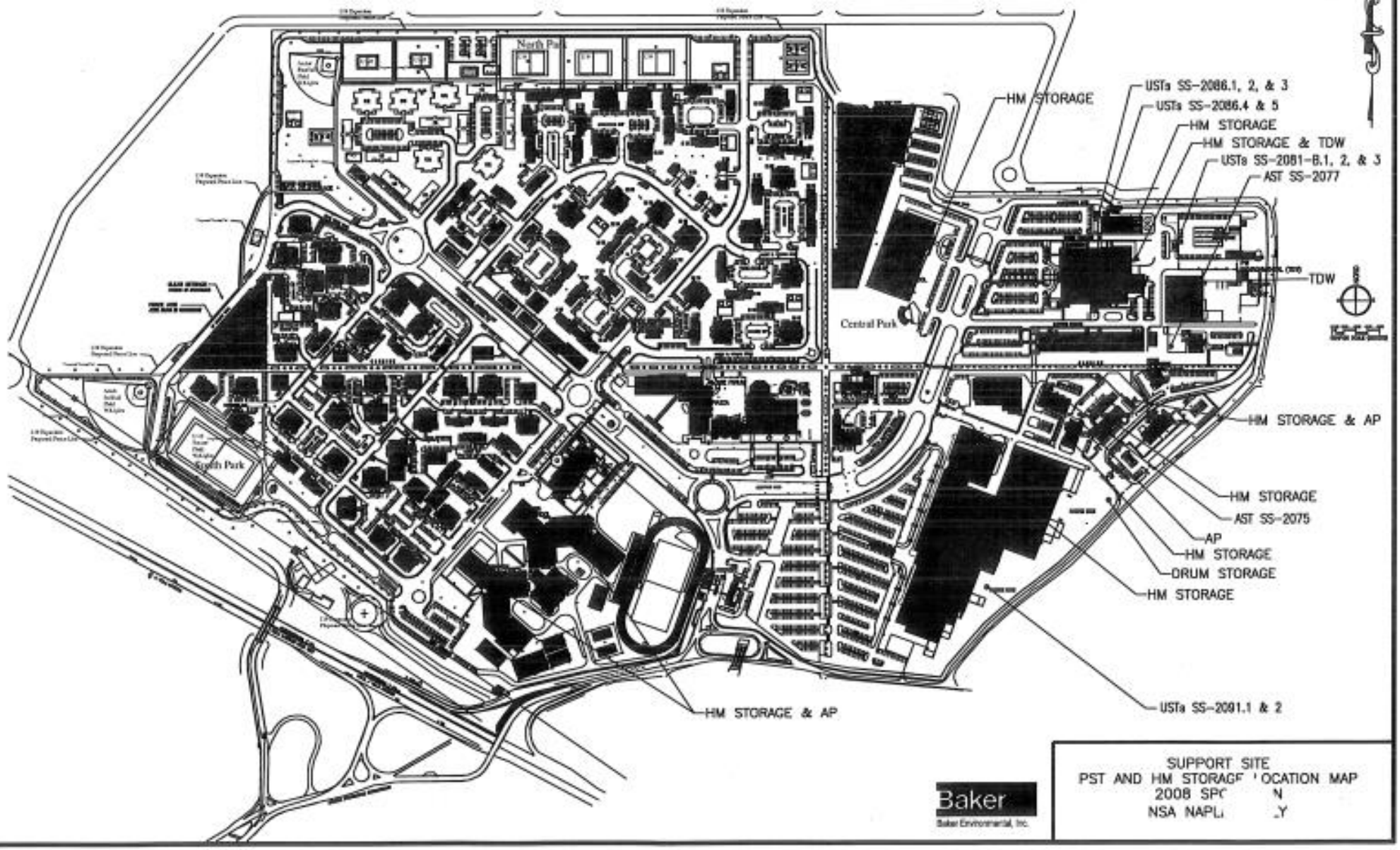
SUPPORT SITE



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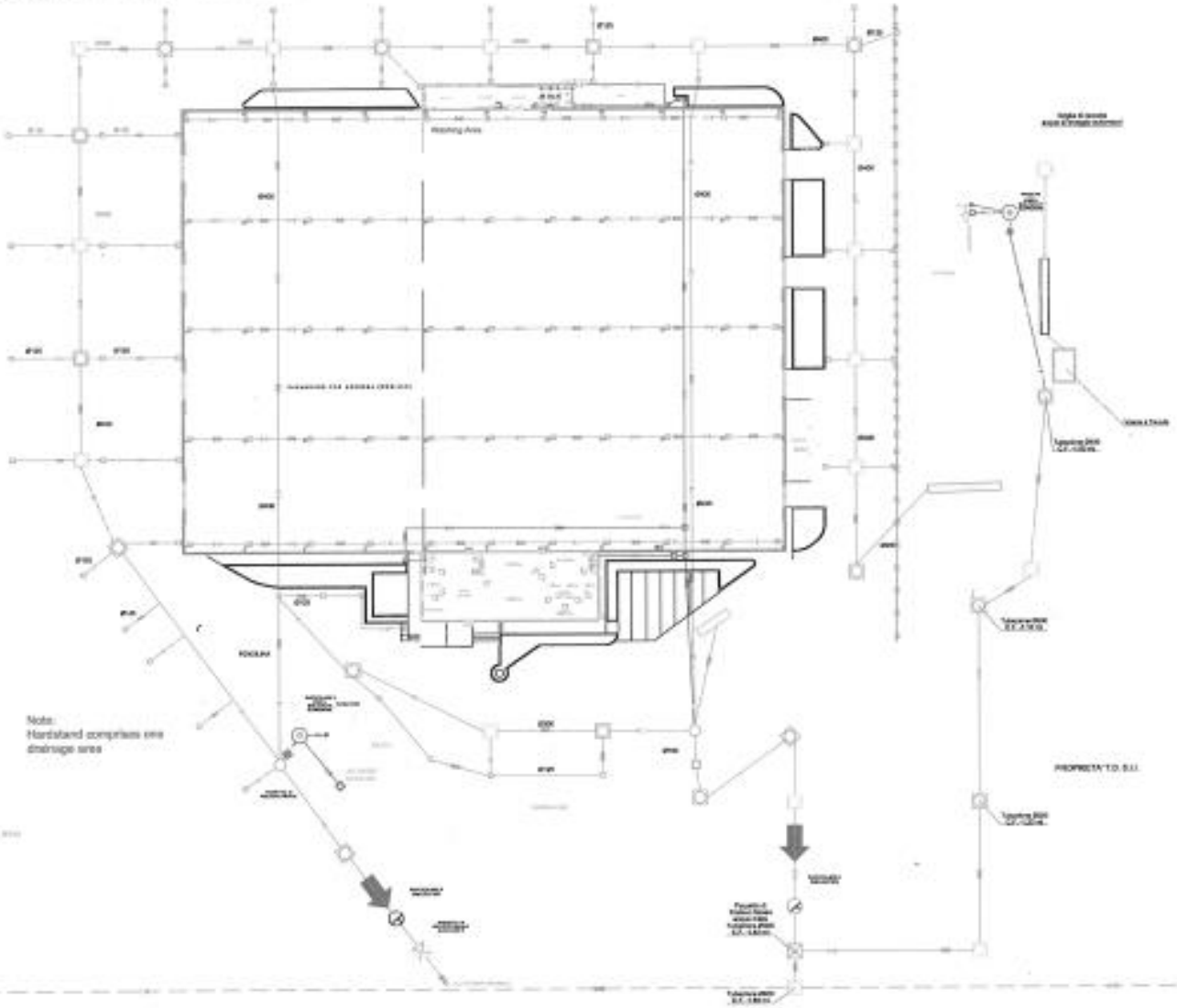
SUPPORT SITE
PST AND HM STORAGE LOCATION MAP
2008 SPRING
NSA NAPLES

Teverola Warehouse
Magazzino di Teverola



Note:

Minor modifications have been made to the configuration of this as-built document, to demonstrate the present status of sanitary and storm sewer.

Northern direction not identified.

Nota:

Nel documento as-built sono state applicate minori modifiche alla configurazione delle reti, per dimostrazione dello stato attuale delle fognature bianche e nere.

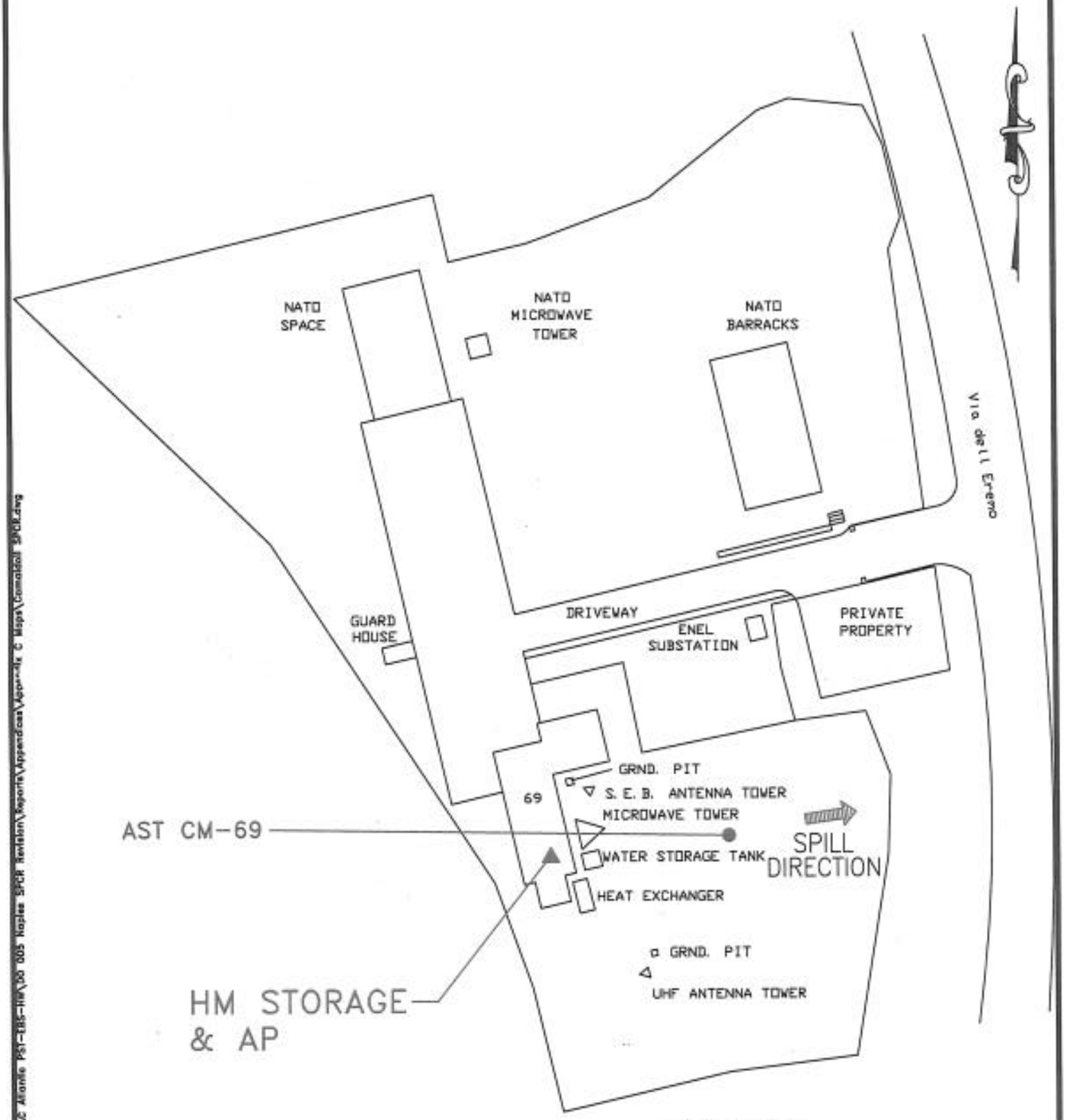
Direzione Nord non è indicata.

Legend New Survey	Legenda Nuovo Rilievo
Site Stormwater Outfall	Scarico finale da sito (acque reflue)

Scale 1:500

0 5 10 15 20 25 50m

Title: STORMWATER LAYOUT LINEE FOGNARIE BIANCHE TEVEROLA HOUSING WAREHOUSE NAPLES, ITALY	Client: NAVAL FACILITIES ENGINEERING COMMAND, ATLANTIC DIVISION FOR NAVAL SUPPORT ACTIVITY, NAPLES, ITALY
Project: STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	URS
Scale: 1:500 / Responsible: B. Tyrsen/V. Happe / Sheet Size: 19x28in	
Date: Jan. 2005 / Drafter: K. Schüler / Appendix: E-03	File: [illegible] / Project No: [illegible]



SCALE: N.T.S.

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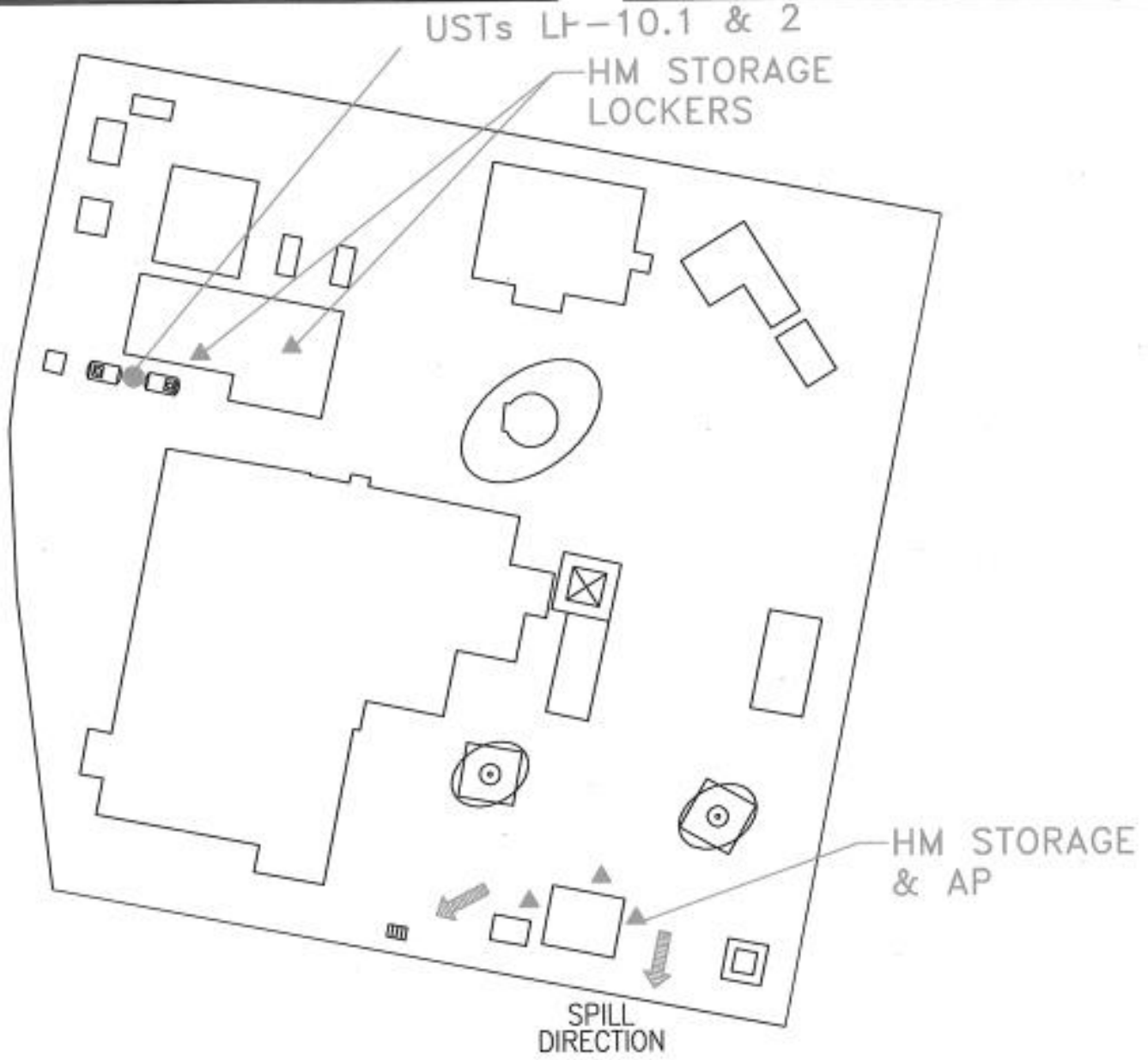
MT. CAMALDOLI RELAY SITE
PST AND HM STORAGE LOCATION MAP
2008 SPCR PLAN
NSA NAPLES, ITALY



LAGO PATRIA SITE
PST AND HM STORAGE LOCATION MAP
2008 SPCR PLAN
NSA NAPLES, ITALY

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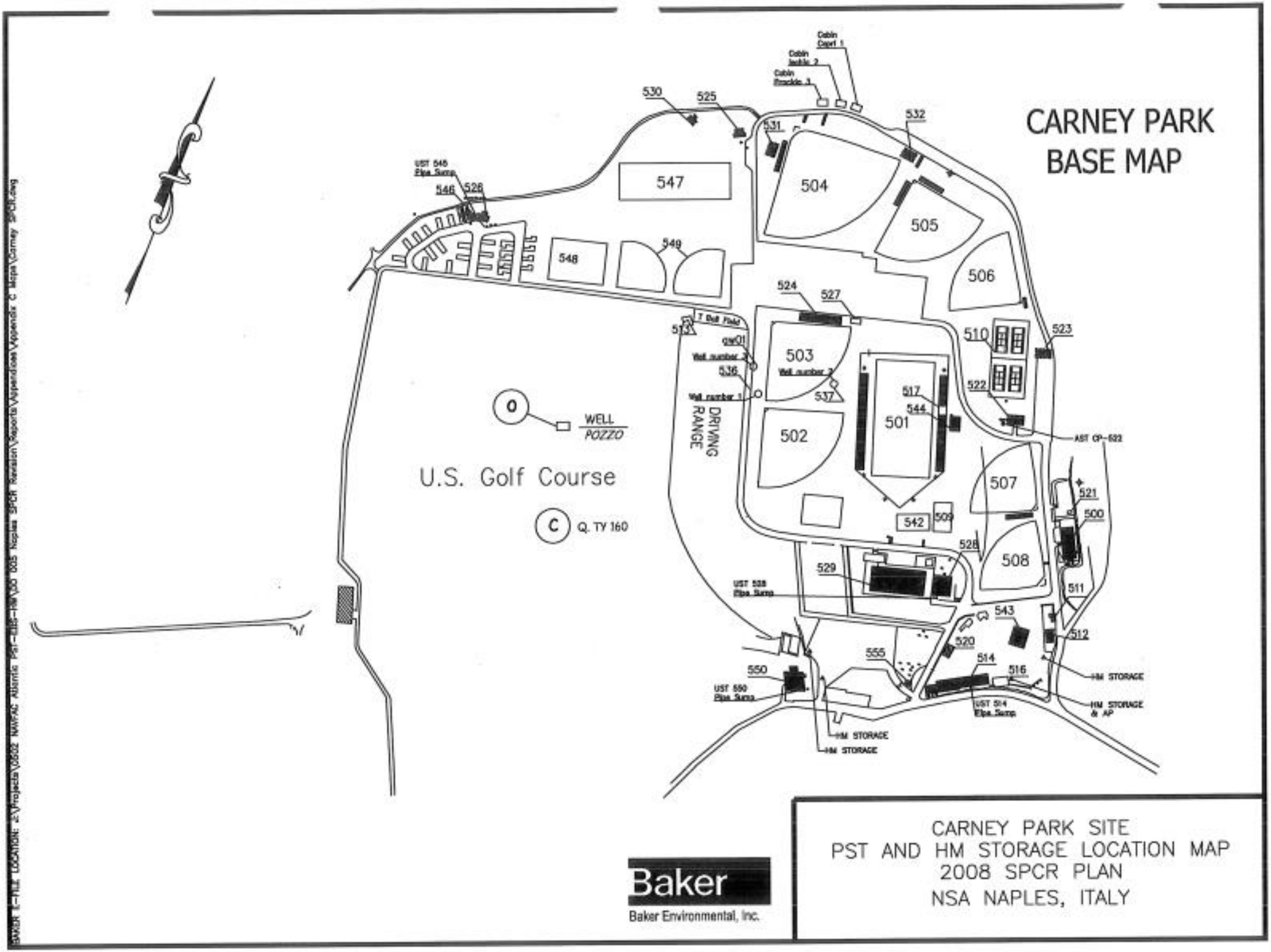

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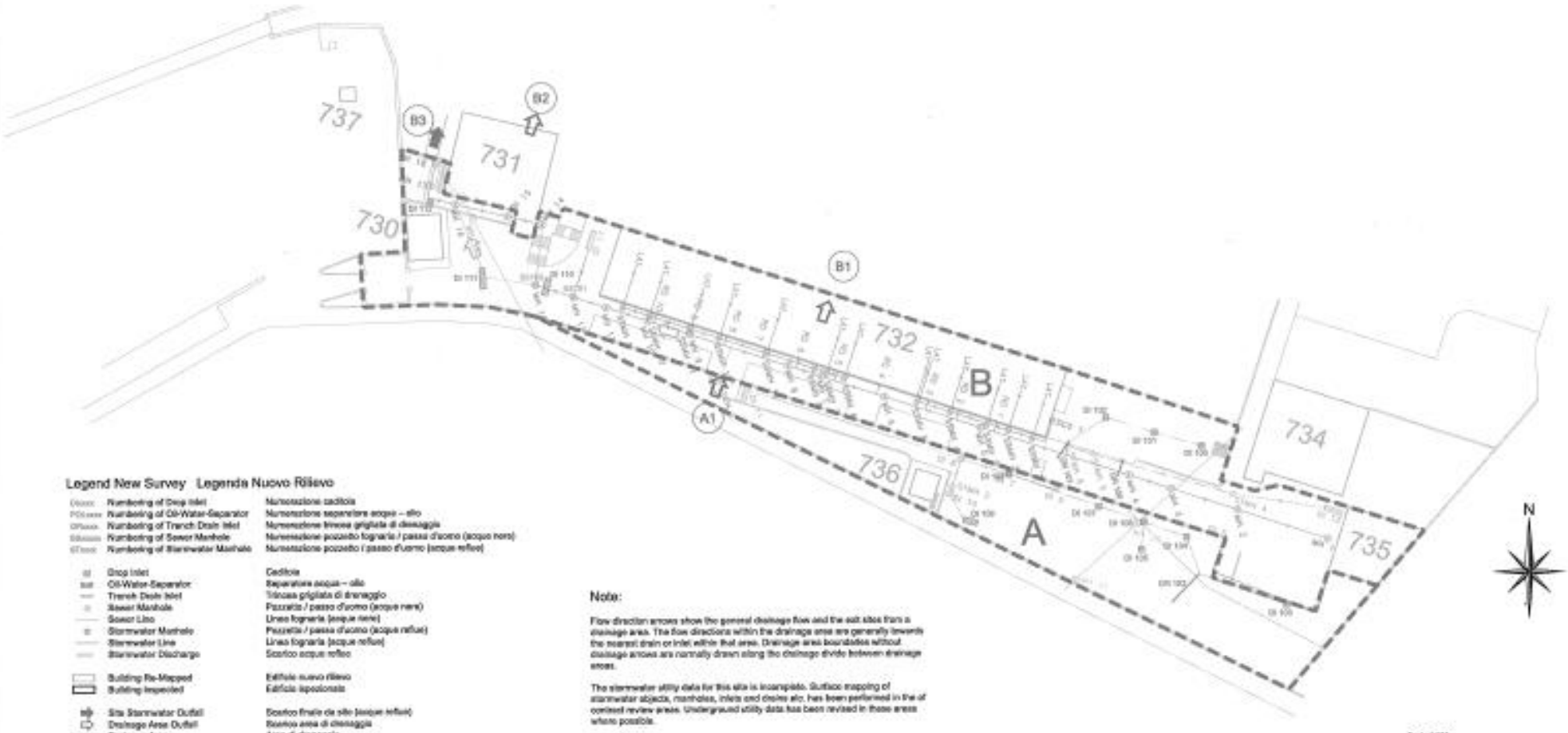
CARNEY PARK SITE
PST AND HM STORAGE LOCATION MAP
2008 SPCR PLAN
NSA NAPLES, ITALY



Legend New Survey Legenda Nuovo Rilievo

DXXXX	Numbering of Drop Inlet	Numerazione caditoia
POXXXX	Numbering of Oil-Water-Separator	Numerazione separatore acqua – olio
CPXXXX	Numbering of Trench Drain Inlet	Numerazione trincea griglata di drenaggio
SMXXXX	Numbering of Sewer Manhole	Numerazione pozzetto fognario / passo d'uomo (acque nere)
STXXXX	Numbering of Stormwater Manhole	Numerazione pozzetto / passo d'uomo (acque reflue)
	Drop Inlet	Caditoia
	Oil-Water-Separator	Separatore acqua – olio
	Trench Drain Inlet	Trincea griglata di drenaggio
	Sewer Manhole	Pozzetto / passo d'uomo (acque nere)
	Sewer Line	Linea fognaria (acque nere)
	Stormwater Manhole	Pozzetto / passo d'uomo (acque reflue)
	Stormwater Line	Linea fognaria (acque reflue)
	Stormwater Discharge	Scarico acque reflue
	Building Re-Mapped	Edificio nuovo rilievo
	Building Inspected	Edificio ispezionato
	Site Stormwater Outfall	Scarico finale da sito (acque reflue)
	Drainage Area Outfall	Scarico area di drenaggio
	Drainage Area	Area di drenaggio
(X)	Numbering of Drainage Area Outfall	Numerazione punto di scarico area di drenaggio
A	Numbering of Drainage Area	Numerazione area di drenaggio
	Water Culvert	Fogna aperta

Legend Existing Structures Legenda Strutture Esistenti

DXXXX	Numbering of Drop Inlet	Numerazione caditoia
RDXX	Numbering of Downspout	Numerazione di pluviale
STXXXX	Numbering of Stormwater Manhole	Numerazione pozzetto / passo d'uomo (acque reflue)
SMXXXX	Numbering of Sewer Manhole	Numerazione pozzetto fognario / passo d'uomo (acque nere)
	Stormwater Manhole	Pozzetto / passo d'uomo (acque reflue)
	Sewer Manhole	Pozzetto / passo d'uomo (acque nere)
	Stormwater Line	Linea fognaria (acque reflue)
	Drop Inlet	Caditoia
	Sewer Line	Linea fognaria (acque nere)
	Flow Direction in Stormwater Line	Direzione flusso in linea fognaria

Note:

Flow direction arrows show the general drainage flow and the exit sites from a drainage area. The flow directions within the drainage area are generally towards the nearest drain or inlet within that area. Drainage area boundaries without drainage arrows are normally drawn along the drainage divide between drainage areas.

The stormwater utility data for this site is incomplete. Surface mapping of stormwater objects, manholes, inlets and drains etc. has been performed in the of contract review areas. Underground utility data has been revised in these areas where possible.

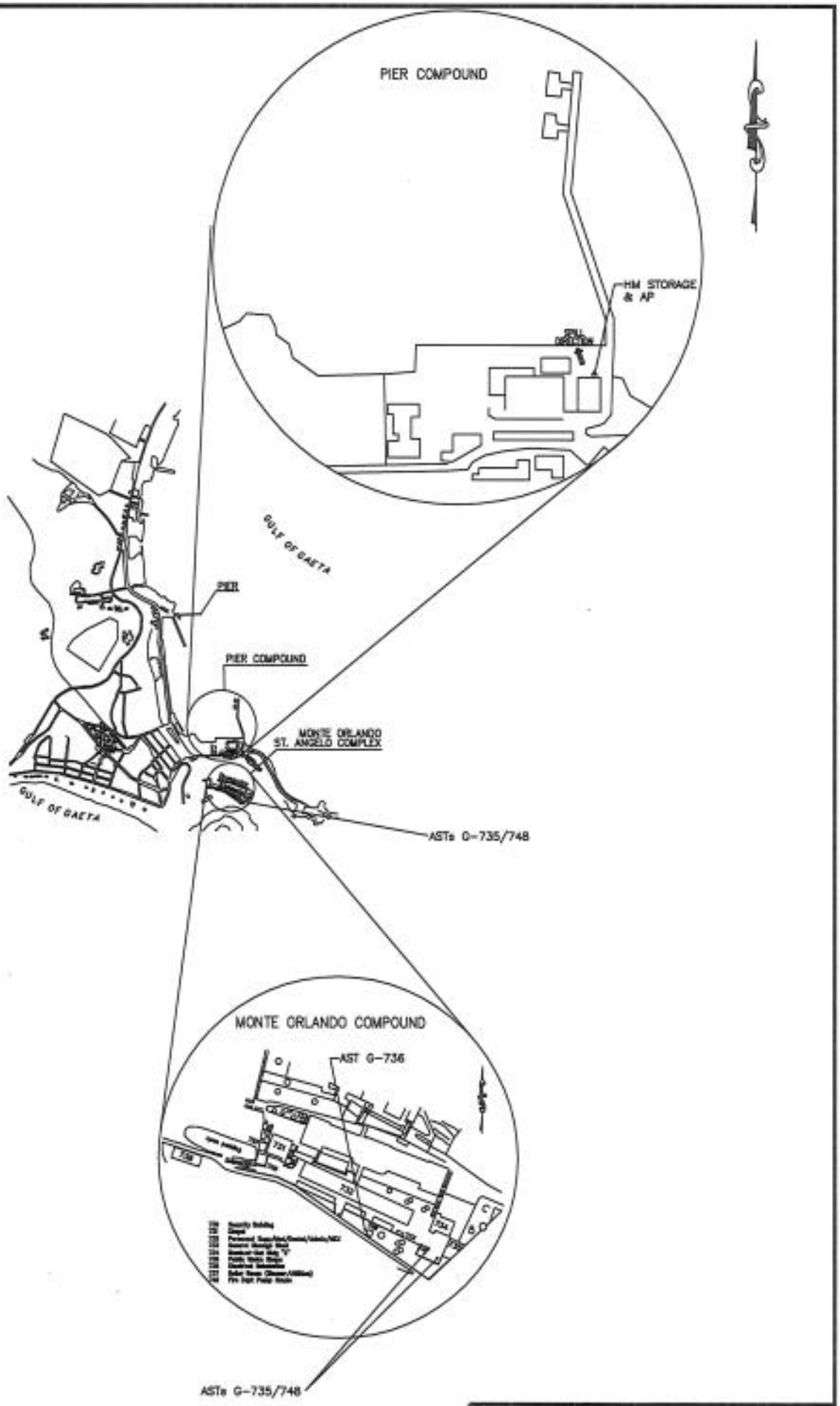
Nota:

La direzione generale di deflusso e il punto di scarico delle acque reflue sono indicato con frecce per ogni area di drenaggio. La direzione di deflusso all'interno dell'area di drenaggio generalmente è verso la trincea o il punto di scarico più vicino. I limiti di un'area di drenaggio sono normalmente indicati con linee senza frecce lungo lo divisa tra aree di drenaggio confinanti.

Le indicazioni circa le strutture fognarie (acque reflue) sono incomplete. Il rilievo delle strutture fognarie, passi d'uomo, pozzetti, drenì ecc. è stato eseguito nelle zone previste da cantiere. Le indicazioni circa i sottoservizi sono state revisionate ove possibile.

Scale 1:600
0 5 10 15 20 25 60m

Title: STORMWATER LAYOUT LINEE FOGNARIE BIANCHE NSA GAETA NAPLES, ITALY	Client: MWWL FACILITIES ENGINEERING COMMAND, ATLANTIC DIVISION FOR NAVAL SUPPORT ACTIVITY, NAPLES, ITALY
Project: STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	URS
Scale: 1:600 / Date: Jan. 2009 / Drawn: B. Tyhecki, Inspire / Checked: K. Kelcher / Approved: E.G.	Rev: / Project No.:



Baker
Baker Environmental, Inc.

GAETA SITE
PST AND HM STORAGE LOCATION MAP
2008 SPCR PLAN
NSA NAPLES, ITALY

APPENDIX D

HS Compatibility Matrix

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Appendix D

Chemical/ Material Compatibility Matrix

Chemical	Wood	Cement	Glass	Cast Iron	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Nickel	Monel	Inconel	Hastelloy	Ceramic	Cermagnet	Epoxy Resins	Phenolic Resins	PVC	EPDM	Polyethylene	Chlorinated Polyethylene	Polypropylene	Teflon	Neoprene	Hypalon	Buna-N	Natural Rubber
Chloroform	-	-	A	A	C	A	A	A	A	A	A	A	A	A	A	A	X	X	X	X	X	A	X	X	X	X
Chlorosulfonic Acid	-	-	A	X	-	-	C	C	A	A	A	A	-	-	X	X	A	-	-	-	-	-	X	-	-	-
Chromic Acid	X	X	A	X	-	X	X	X	X	X	-	-	A	-	X	X	A	-	C	-	-	-	X	-	-	-
Creosote	-	X	A	-	-	A	A	C	-	C	-	-	-	-	-	X	-	X	-	-	-	-	X	C	-	X
Cresol	-	X	A	A	-	A	A	A	A	A	-	-	-	-	-	X	X	-	X	-	-	-	X	C	-	X
Cyclohexane	-	-	A	A	C	-	-	A	-	A	-	-	-	-	-	X	A	X	X	A	A	-	X	X	A	X
Cyclohexanol	-	-	A	-	-	-	A	X	-	-	-	-	-	-	A	-	X	-	A	-	-	-	X	-	-	-
Cyclohexanone	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-	X	-	-	-
Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	A	-	-	-	X	X	-	X
Diesel Oil	-	-	-	A	-	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diethylamine	-	-	-	-	-	A	A	C	A	A	A	-	A	-	-	-	X	-	-	-	-	-	X	-	-	-
Dimethyl Hydrazine	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
Ether (Ethyl or Diethyl)	-	-	A	-	-	-	C	C	-	-	-	-	-	-	X	-	X	-	X	-	-	-	X	-	-	-
Ethyl Acetate	A	X	A	A	-	A	A	A	A	A	A	A	A	-	A	A	X	-	X	-	-	-	X	-	-	-
Ethyl Alcohol (Ethanol)	-	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	-	A	-	A	A	A	A
Ethyl Benzene	-	-	A	-	A	-	A	A	-	-	-	-	-	-	A	-	X	X	X	C	-	-	X	X	-	X
Ethyl Chloride	-	-	-	-	X	A	A	C	-	-	-	A	A	-	-	-	-	-	C	-	X	A	C	X	X	X
Ethyl Mercaptan	-	-	A	-	-	-	A	A	-	-	-	-	-	-	X	-	-	-	-	-	-	-	X	-	-	-
Ethylene	-	-	-	-	A	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Dichloride	-	-	A	-	X	A	A	C	A	A	C	A	A	-	A	A	X	C	X	C	A	A	X	X	X	X
Ethylene Oxide	-	-	-	-	X	A	A	A	-	-	-	A	A	-	-	-	-	-	-	-	-	A	-	-	X	-
Formaldehyde Solution	-	-	A	C	C	-	C	C	A	A	A	A	A	C	A	A	A	C	A	C	A	A	A	C	C	C
Formic Acid	-	-	A	X	-	A	A	C	A	A	X	A	A	-	A	C	A	-	A	-	-	-	A	-	-	-
Gasoline	-	-	A	A	-	A	A	A	A	A	A	A	A	-	A	A	C	-	X	-	-	-	X	-	-	-
Glycerin	-	X	A	A	-	A	A	A	A	A	A	A	A	-	-	A	A	-	A	-	-	-	C	-	-	-
Hydrazine	X	-	X	X	-	A	A	A	X	X	X	X	-	-	A	A	A	-	-	-	-	-	X	-	-	-
Hydrochloric Acid	-	-	A	X	X	X	X	X	X	X	A	X	A	X	A	X	A	-	A	C	A	A	X	A	C	A
Hydrofluoric Acid	-	X	X	X	X	X	X	X	X	A	-	A	X	-	A	A	A	-	A	C	-	A	X	A	X	A
Hydrogen	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	C	A	-	-	A	A	A	-	C
Hydrogen Cyanide	-	-	A	C	-	A	A	A	A	A	A	A	A	-	A	C	A	-	A	-	-	-	X	-	-	-
Hydrogen Peroxide	X	C	C	X	-	C	C	A	C	C	A	A	A	A	-	C	A	-	A	C	A	A	A	A	X	C
Hydrogen Sulfide	-	-	-	-	X	C	C	C	A	C	-	A	A	A	-	-	-	A	-	-	A	A	A	C	C	X
Isopropyl Alcohol (Isopropanol)	-	-	-	-	A	A	A	C	-	-	-	A	A	-	-	-	-	C	A	-	A	-	A	A	C	A
Kerosene	-	-	A	A	-	A	A	A	A	A	A	A	A	-	A	A	A	-	X	-	-	-	X	-	-	-
Mercury	-	-	-	-	C	A	A	C	-	-	-	C	A	-	-	-	-	A	A	-	A	A	C	A	A	C
Methane Gas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	A	-	-	-	A	C	-	X
Methyl Alcohol (Methanol)	A	A	A	A	A	A	A	C	A	A	A	A	A	A	A	A	A	A	A	C	A	A	A	A	A	A
Methyl Ethyl Ketone	-	A	A	-	A	A	A	A	-	-	-	-	-	-	X	A	X	A	X	-	A	A	X	X	X	C
Methyl Isobutyl Ketone	-	-	A	-	-	A	A	A	-	-	-	-	-	-	C	A	X	-	X	C	C	-	X	X	X	X
Methylene Chloride	-	-	-	-	C	A	A	A	-	-	-	A	A	-	-	-	-	-	-	C	X	A	-	-	X	-
Naphtha	-	-	A	A	-	A	A	A	A	A	A	A	A	-	A	A	C	-	A	-	-	-	X	-	-	-
Naphthalene	-	-	-	A	A	-	-	A	-	-	-	-	-	-	-	A	X	X	X	-	C	A	X	X	X	X
Nitric Acid	X	X	A	X	-	C	C	C	X	X	X	X	A	C	X	X	X	-	X	X	X	A	X	X	X	X
Nitrobenzene	-	-	A	A	-	A	A	A	A	A	A	A	A	-	C	C	X	-	X	-	-	-	X	-	-	-
Nitropropanes	-	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	A	-	-	-	-	-	X	-	-	-
Oxalic Acid	-	A	A	X	-	C	C	C	A	A	A	A	A	-	A	-	A	-	A	-	-	-	A	-	-	-
Oxygen Gas	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	C	A	C	-	-	C	C	-	C
Parathion	-	-	-	-	-	A	A	A	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	C	-	-	X
Perchloric Acid	X	X	C	X	-	X	X	X	X	X	-	-	-	A	-	C	-	C	-	-	-	-	X	-	-	-
Petroleum Ether	-	-	A	A	-	A	A	A	A	A	A	A	A	-	A	A	C	-	A	-	-	-	X	-	-	-
Phenol	A	A	A	A	C	A	A	A	A	A	A	A	A	A	A	X	X	C	X	C	C	A	X	X	X	X
Picric Acid	-	-	A	X	-	A	A	X	X	X	X	A	A	-	-	X	X	-	A	-	-	-	X	-	-	-
Potassium Cyanide	-	A	C	C	-	A	A	A	A	A	A	A	A	-	A	X	A	-	A	-	-	-	A	-	-	-
Pyridine	A	A	A	A	-	A	A	A	-	-	-	-	A	-	-	A	X	-	A	-	-	-	X	-	-	-
Silver Nitrate	-	-	A	A	-	A	A	X	X	X	A	A	A	-	A	A	A	-	A	-	-	-	A	-	-	-

Chemical/ Material Compatibility Matrix (continued)

Chemical	Wood	Cement	Glass	Cast Iron	Carbon Steel	Stainless Steel 304	Stainless Steel 316	Aluminum	Nickel	Monel	Inconel	Hastelloy	Ceramic	Ceramagnet	Epoxy Resins	Phenolic Resins	PVC	EPDM	Polyethylene	Chlorinated Polyethylene	Polypropylene	Teflon	Neoprene	Hypalon	Buna-N	Natural Rubber
Sodium	-	-	-	-	-	A	A	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Carbonate	-	C	A	A	C	A	A	X	A	A	A	A	A	-	A	A	A	A	A	C	A	A	A	A	A	A
Sodium Chlorate	-	-	-	-	X	C	C	C	-	-	-	A	A	-	-	-	-	-	-	-	A	A	-	-	X	-
Sodium Chloride	A	A	A	C	X	C	C	C	A	A	C	A	A	A	A	A	A	A	A	C	A	A	A	A	A	A
Sodium Cyanide	A	A	C	A	C	A	A	X	X	X	X	-	A	-	A	A	A	C	A	-	A	A	A	A	A	A
Sodium Hydroxide	-	A	C	A	A	A	A	X	A	A	A	A	X	A	A	X	A	-	A	C	A	A	X	A	X	C
Sodium Hypochlorite	-	-	A	X	X	X	X	X	C	C	C	X	A	-	C	X	A	C	A	C	A	A	X	C	A	C
Sodium Nitrate	-	-	-	-	C	A	A	A	C	C	-	A	A	A	-	-	-	A	A	A	A	A	A	A	C	A
Sodium Sulfide	-	-	-	-	-	-	-	X	C	C	-	-	A	-	-	-	-	A	A	A	A	A	A	A	C	A
Stoddard Solvent	-	-	A	A	-	A	A	A	A	A	A	A	A	-	A	A	C	-	A	-	-	-	X	-	-	-
Styrene (Monomer)	-	-	A	-	-	-	C	A	-	-	-	-	-	-	-	X	X	X	X	C	-	A	X	-	X	X
Sulfur	-	-	-	-	-	A	A	-	-	-	-	A	-	-	-	-	-	C	X	-	-	-	C	C	-	C
Sulfur Dioxide	-	-	-	-	A	A	A	A	X	X	-	A	A	-	-	-	-	C	A	-	X	A	C	C	X	C
Sulfuric Acid	X	-	A	X	X	X	X	X	X	A	X	A	A	-	A	X	A	-	A	X	X	A	A	C	C	X
Tetrahydrofuran	-	-	-	-	-	-	A	-	-	-	-	-	A	-	X	-	X	-	X	-	-	-	X	-	-	-
Tetrachloroethane	-	-	A	-	-	-	A	X	-	-	-	-	-	-	A	-	X	-	-	-	-	-	X	-	-	-
Tetraethyl Lead	-	-	-	-	C	-	A	-	-	-	-	-	-	-	-	-	A	-	A	-	-	-	-	-	-	-
Toluene	C	C	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	X	X	C	X	A	X	X	X	X
Transformer Oil	-	-	A	-	-	-	A	A	-	-	-	-	-	-	A	A	X	-	-	-	-	-	A	-	-	-
Trichloroethane	-	-	-	-	-	-	-	C	-	-	-	-	A	-	-	-	-	X	A	C	-	A	X	X	X	X
Trichloroethylene	-	-	A	A	-	X	A	A	A	A	A	A	A	-	A	A	X	-	X	-	-	-	X	-	-	-
Turpentine	-	-	A	-	A	-	A	A	-	-	-	-	-	-	A	-	-	X	A	C	C	A	X	X	X	X
Vinyl Chloride	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	A	-	-	-	X	X	-	C
Xylenes	-	X	A	-	-	A	-	A	-	-	-	-	-	A	A	A	A	X	A	X	X	A	A	X	X	X

Key:
A = Acceptable
C = Conditionally acceptable
X = Unacceptable
- = Insufficient Information

APPENDIX E

POL Inspection Checklists

DIKE DRAINAGE INSPECTION- CHECKLIST 1

Inspector's Name/Phone Number: _____ **Inspector's Signature:**

TANK #:_____

Responsible Activity: _____

Indicate Date, initials, and yes/no to contamination on water													
NOTES:													

BULK PST DAILY INSPECTION- CHECKLIST 2

Inspector's Name/Signature/Phone Number:

Tank Number: _____

Responsible Activity: _____

Inspection Items	Year:							
	Month:	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**	**Sun**
	Date:							
	Initials:							
Tank & Piping structural integrity ok?								
Drainage valves closed?								
Condition of valves ok?								
Water/trash in containment?								
Evidence of spills?								
Cracks in containment?								
Cathodic Protection System ok?								
Condition coating on Tank & Piping ok?								
Tank marking legible?								
HLA/liquid level gauge working?								
Tank/Piping support and foundation ok?								
Spill control systems (OWS) ok?								
Maintenance actions:								
Date of request:								
Date work completed:								

NOTES:

UST MONTHLY INSPECTION- CHECKLIST 3

Inspector's Name/Phone Number: _____ **Inspector's Signature:**

Tank Number: _____

Responsible Activity: _____

Inspection Items	Year:												
	Month:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	Date:												
	Initials:												
Is leak detection system working?													
Monthly leak detection report?													
Oil/water in pipe sump?													
Is overfill alarm working?													
Water in tank?													
Evidence of surface spills?													
Problems with pumps?													
Is dispenser piping leaking?													
Is cathodic protection working?													
Is liquid level gauge working?													
Are tank markings legible?													
Is the Fuel Master system working?													
Maintenance actions:													
Date of request:													
Date work completed:													

NOTES:

AST MONTHLY INSPECTION- CHECKLIST 4

Inspector's Name/Phone Number: _____ **Inspector's Signature:**

Tank Number: _____

Responsible Activity: _____

Inspection Items	Year:												
	Month:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	Date:												
	Initials:												
Tank & Piping structural integrity ok?													
Drainage valves closed?													
Condition of valves ok?													
Water/trash in containment?													
Evidence of spills?													
Cracks in containment?													
Cathodic Protection System ok?													
Condition of coating on Tank & Piping ok?													
Tank marking legible?													
HLA/liquid level gauge/FM working?													
Tank/Piping support and foundation ok?													
Spill control systems (OWS) ok?													
If present, is dispenser leaking?													
Maintenance actions:													
Date of request:													
Date work completed:													

NOTES:

OFFLOADING/LOADING AREA DAILY INSPECTION- CHECKLIST 5

Inspector's
Name/Signature/Phone Number:
Loading/Offloading Area: _____
Responsible Activity: _____

Inspection Items	Year:							
	Day	**Mon**	**Tue**	**Wed**	**Thur**	**Fri**	**Sat**	**Sun**
	Date:							
	Initials:							
Is Overfill Prevention System functioning?								
Condition of containment ok?								
Condition of drainage system ok?								
Water in containment?								
Drain valves locked?								
Condition of piping, strainers, filters etc. ?								
Any PM required?								
Maintenance actions:								
Date of request:								
Date work completed:								

NOTES:

TANK TRUCK DAILY INSPECTION- CHECKLIST 6

Inspector's
Name/Signature/Phone Number:
Truck: _____
Responsible Activity: _____

Inspection Items	Year:							
	Day	**Mon**	**Tue**	**Wed**	**Thur**	**Fri**	**Sat**	**Sun**
	Date:							
	Initials:							
Is Overfill Prevention System functioning?								
Condition of Tank Compartments ok?								
Condition of Valves system ok?								
Breaks Functioning?								
Fire Extinguisher on board?								
Lights, horn & signals working ?								
Any PM required?								
Maintenance actions:								
Date of request:								
Date work completed:								

NOTES:

CATHODIC PROTECTION QUARTERLY INSPECTION- CHECKLIST 7

Inspector Name/Phone Number: _____ **Inspector's Signature:**

Tank Number: _____

Responsible Activity: _____

Inspection Items	Year:												
	Quarter:	1	2	3	4	1	2	3	4	1	2	3	4
	Date:												
	Initials:												
Is CP System functioning?													
What does the rectifier read?													
What do the Test Points read? (add additional notes as needed)													
Condition of overall system ok?													
Water in rectifier?													
All leads appear intact?													
Any PM required?													
Maintenance actions:													
Date of request:													
Date work completed:													

NOTES:

OIL FILLED EQUIPMENT & GENERATOR MONTHLY INSPECTION- CHECKLIST 8

Inspector Name/Phone Number: _____ **Inspector's Signature:**

Tank Number: _____

Responsible Activity: _____

Inspection Items													
	Year:												
	Month:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	Date:												
	Initials:												
Evidence of spills?													
Fuel Tank Shows Corrosion?													
Maintenance actions:													
Date of request:													
Date work completed:													

NOTES:

ABOVEGROUND STORAGE TANK (AST) FACILITY INSPECTION CHECKLIST

Inspection Date(s)[1]				Inspector(s)[2]			
Wk1	Wk2	Wk3	Wk4	Wk1	Wk2	Wk3	Wk4

	Items of Inspection[3]	Week 1	Week 2	Week 3	Week 4
1	Containment berms in satisfactory condition (i.e. free of cracks and corrosion.)				
2	Containment berms free of standing water.				
3	Containment berms free of high grass, weeds and debris.				
4	Ground surfaces around tank, containment structures and loading racks free of leakage, spills or signs thereof.				
5	Berm drain valves secured and locked in the closed position.				
6	Oily water separators in satisfactory condition. Separator holding tanks gauged and emptied as applicable.				
7	Tank high level alarm or valve systems checked and tested and in serviceable, fully operable condition.				
8	Fillstand overfill protection systems in serviceable condition and fully operable.				
9	Tank shell surfaces and foundation free of leakage. Welds, rivets/bolts, seams and joints free of rust and deterioration.				
10	Tank water draw-off valves secured and locked in the closed position.				
11	Tank inlet valves locked in the closed position when not in use. Outlet (issue) valves secured at the end of the duty day.				
12	Piping, valves, expansion joints, and other associated equipment/fittings free of deterioration and signs of leakage.				
13	Pipe supports in satisfactory condition.				
14	Dispensers, if present, free of leaks.				
15					

AST inspections will be accomplished every other Friday, prior to the close of business.

1. Inspection Date(s) - enter the date of the inspection in the appropriate block.

2. Inspector(s) - enter the inspector'sSignature in the appropriate block.

3. Item of Inspection - enter Y-Yes, N-No, or N/A-Not Applicable in each box of the inspection checklist to indicate the state of compliance of each checklist item. On the reverse side of this form, provide comments on any item marked "No." Explain fully in a date, item, observation/action taken format.

On completion of the fourth weekly inspection, make a copy of the completed form. File and hold the original for three (3) years.

CONCRETE VAULTED AND STEEL DOUBLE-WALL AST FACILITY WEEKLY INSPECTION CHECKLIST

DATE: _____ INSPECTOR'S SIGNATURE: _____

TANK # & LOCATION: _____

AREAS COVERED: _____

wk. ___	wk. ___	wk. ___	wk. ___	wk. ___

1. Concrete encasement free of cracks or signs of damage from vehicle impact.
2. Tank free of signs of leakage from any existing cracks in concrete encasement.
3. Ground surface around tank free of signs of leakage or spills.
4. Tank liquid level gauge functioning, readable and accurate.
5. Tank fill ports closed and locked when not in use.
6. Valves and piping/tubing free of signs of leakage or deterioration.
7. Piping/tubing joints and fitting free of signs of leakage or deterioration.
8. Piping/tubing supports in satisfactory condition.
9. Area around tank accessible and free of clutter and excessive vegetation .

(Place either a Y=yes, N=no or N/A=not applicable in each box above to indicate the state of compliance with each checklist item.)

Comments (Please provide information on any item circled "No")

Date Item # Observation and Action

DRUM STORAGE FACILITY WEEKLY INSPECTION CHECKLIST

DATE: _____ INSPECTOR'S SIGNATURE: _____

LOCATION & BLDG.#: _____

AREAS COVERED: _____

wk.	wk.	wk.	wk.	wk.

1. Containment curbing in satisfactory condition (i.e., free of breaks, cracks, holes, corrosion or stains).
2. Containment free of standing water or oil, debris and unrelated stored items.
3. Ground surface around drums and within containment area free of signs of spills or leaks.
4. Manual drainage valve(s) for containment area closed and secured.

(Place either a Y=yes, N=no or N/A=not applicable in each box above to indicate the state of compliance with each checklist item.)

Comments (Please provide information on any item circled "No")

Date Item # Observation and Action

APPENDIX F

HM/DW Inspection Checklists

NSA Naples AP and TDW Inspection Checklist

ACTIVITY NAME	CODE	BLDG. #	PoC
INSPECTOR NAME	DATE OF INSPECTION		

HW warning signs posted?										
Security barriers in place (facility locked/access restricted)?										
Containment in place, good condition, and free of leaks/liquid?										
Containers all in storage area & stored so they will not spill?										
Aisle space maintained?										
Area clean and orderly (good housekeeping)?										
Area free of spills and leaks?										
Incompatibles are separated?										
Contents compatible with containers?										
Containers have sufficient outage? (< 90% full)										
Containers in good condition (not rusted/damaged)?										
Containers tightly closed?										
All containers with dw marked?										
All markings have start date, composition, waste codes, etc.?										
All containers within accumulation limits:										
60 days TIME LIMIT for TDW (Temporary Deposit of Waste)										
1 container per waste stream QUANTITY LIMIT for AP (Accumulation Point)										
Spill kit on site?										
Fire extinguisher & ground strap available for ignitables?										
Emergency eyewash and communication device working?										

Y=Yes **Does not require corrective actions**

N= No **Requires corrective actions**

CORRECTIVE ACTION(S) TAKEN

Baker

APPENDIX G

Spill Predictions

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GENERAL SPILL ESTIMATIONS

ASSUMPTIONS: Reasonable expectations rather worst-case scenarios.

40 CFR 112.7(b) calls for information on spills from tanks rather than spills escaping from the facility; any facility in compliance with the regulation would have no spill escaping the facility since it would be retained in secondary containment.

Manifolded tanks are equivalent to a single tank whose capacity of the sum of all the tanks piped together; leak in one tank could drain all.

ESTIMATION OF FLOW RATE: Use units of gallons and minutes in all calculations.

Convert all truck pumping rates and piping delivery rates to gallons per minute (gpm) using Conversion to Gallons Per Minute (gpm) chart below.

Use Estimation of Flow Rate chart below to determine rates for the facility.

ESTIMATION OF TOTAL QUANTITY: Use Estimation of Total Quantity Discharged chart below to determine total quantity discharged for the facility.

ESTIMATION OF PATHWAYS: The facility must be walked and pathways from each tank to navigable waters marked on a field copy of an appropriate map. Topographic maps should never be the sole source of pathways; they do not show ditches, curbs, drains, and other features obvious to a field observer that would direct flow.

CONVERSION TO GALLONS PER MINUTE (gpm)	
GIVEN	MULTIPLY BY
bbl/hr	.7
gal/hr	.0167

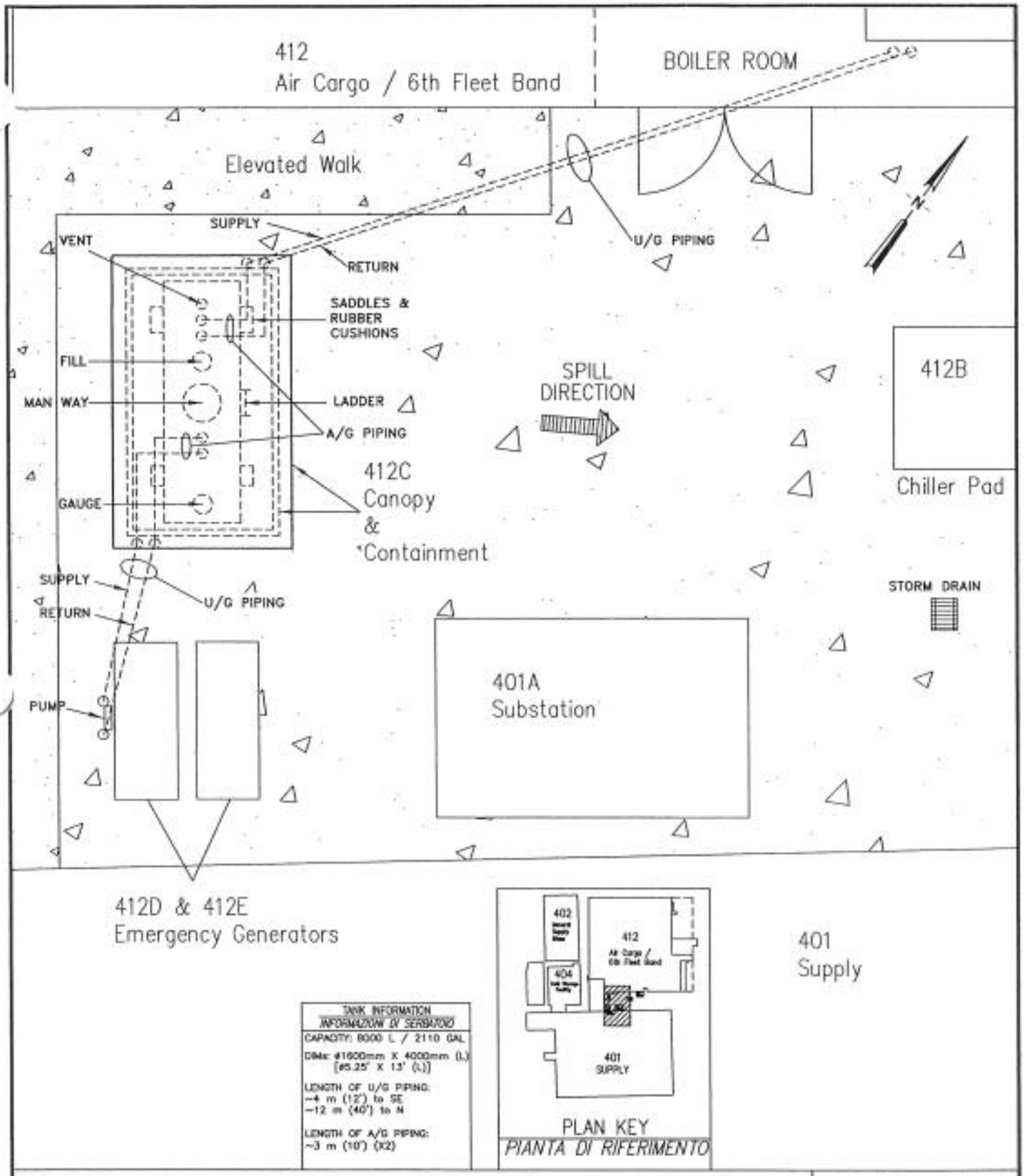
ESTIMATION OF FLOW RATE	
FAILURE TYPE	ESTIMATED FLOW RATE
OVERFILL: (via tank truck)	RATE = MAXIMUM TRUCK PUMPING RATE The highest pumping rate the supplier's trucks are capable of.
OVERFILL: (via piping)	RATE = MAXIMUM PIPING DELIVERY RATE The highest rate the supplying piping can actually delivery "oil" to the facility at. The smaller the supplying piping, the lower the percentage of rated supply pump capacity that can actually be delivered (i.e., a 675 gpm pump may deliver 500 gpm via a 10" pipe, but only 200 gpm via a 4" pipe).
RUPTURE:	RATE = $\frac{\text{CAPACITY OF LARGEST TANK}}{60}$ Assume the largest tank (or manifolded tank set) in the facility will empty in 60 minutes.
LEAKAGE:	RATE = $\frac{\text{CAPACITY OF LARGEST TANK}}{10{,}080}$ Assume the largest tank (or manifolded tank set) in the facility will empty in a week (10,080 minutes)
FAULTY PIPING, ETC:	RATE = $\frac{\text{CAPACITY OF LARGEST TANK}}{1440}$ Assume the largest tank (or manifolded tank set) in the facility will empty in a day (1440 minutes)

POL	ESTIMATED FLOW RATE
Diesel Fuel truck (1)	1. Overfill by dispenser = 10 gpm 2. Fuel truck rupture = 83 gpm
Aircraft parking apron	1. Overfill by fuel truck = 300 gpm
AST C-412 – Capo Building 412	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 32 gpm 3. Leakage = 0.05 gallons /week
AST C-449 – Capo Building 449	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 37 gpm 3. Leakage = 0.05 gallons/week
AST CP-522 – Carney Park Building 522	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 13.3 gpm 3. Leakage = 0.05 gallons/week
AST CM-69 – Camaldoli Building 69	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 16.6 gpm 3. Leakage = 0.05 gallons/week
AST G-748 – Gaeta Building 748	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 3.5 gpm 3. Leakage = 0.052 gallons/week
AST G-735 – Gaeta Building 735	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 25 gpm 3. Leakage = 0.05 gallons/week

AST G-736 – Gaeta Building 736	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 8.8 gpm 3. Leakage = 0.05 gallons/week
AST SS-2077 – Support Site Building 2077	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 22 gpm 3. Leakage = 0.05 gallons/week
AST SS-2075 - Support Site Building 2075	1. Overfill by fuel truck = 100 gpm 2. Tank rupture = 5.7 gpm 3. Leakage = 0.05 gallons/week

APPENDIX H

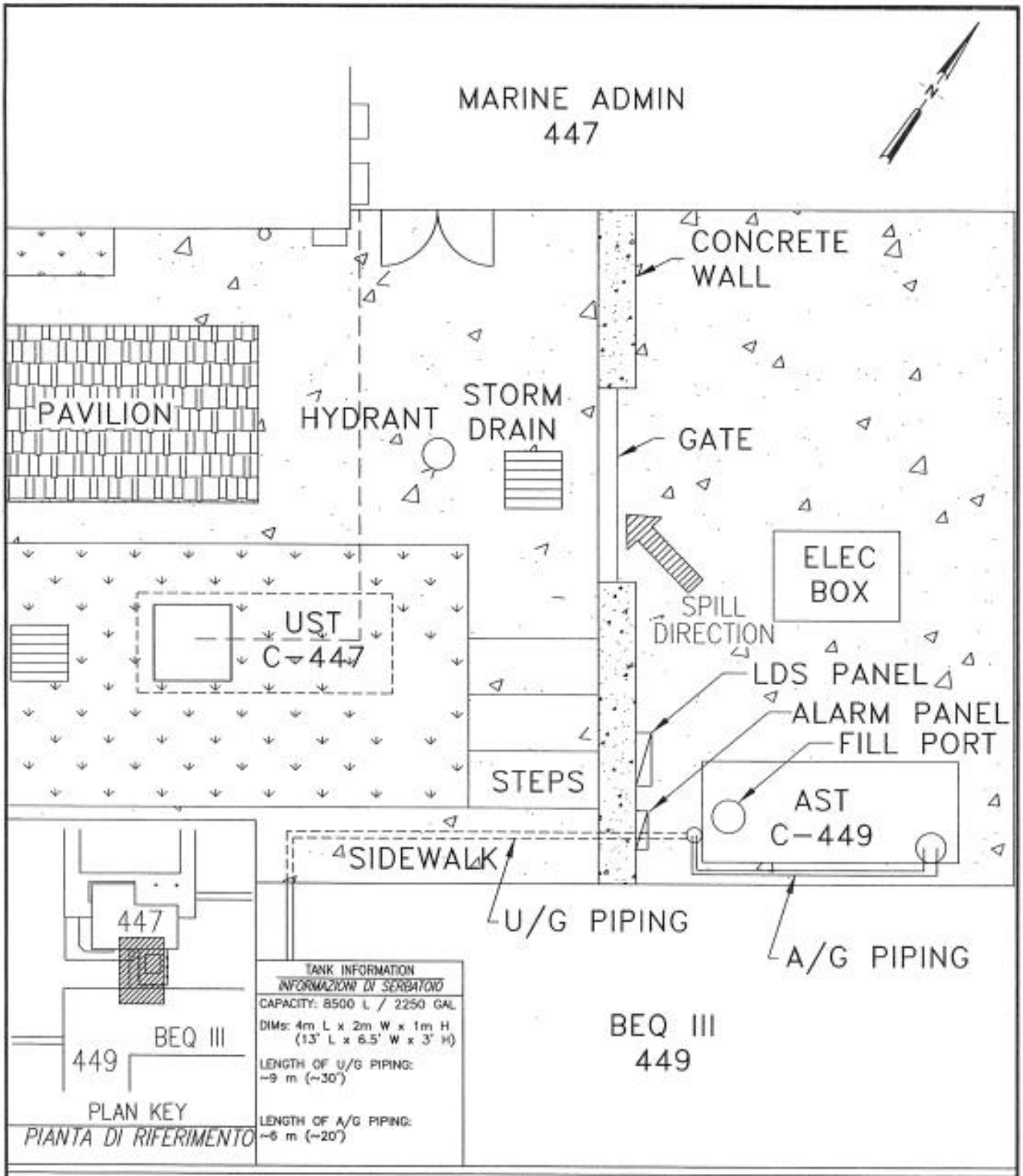
Site Drawings & Photos



AST C-412
AIR CARGO-BLDG #412
NSA NAPLES, ITALY
CAPODICHINO

SCALE: (NTS)

Baker
ChallengeUs.

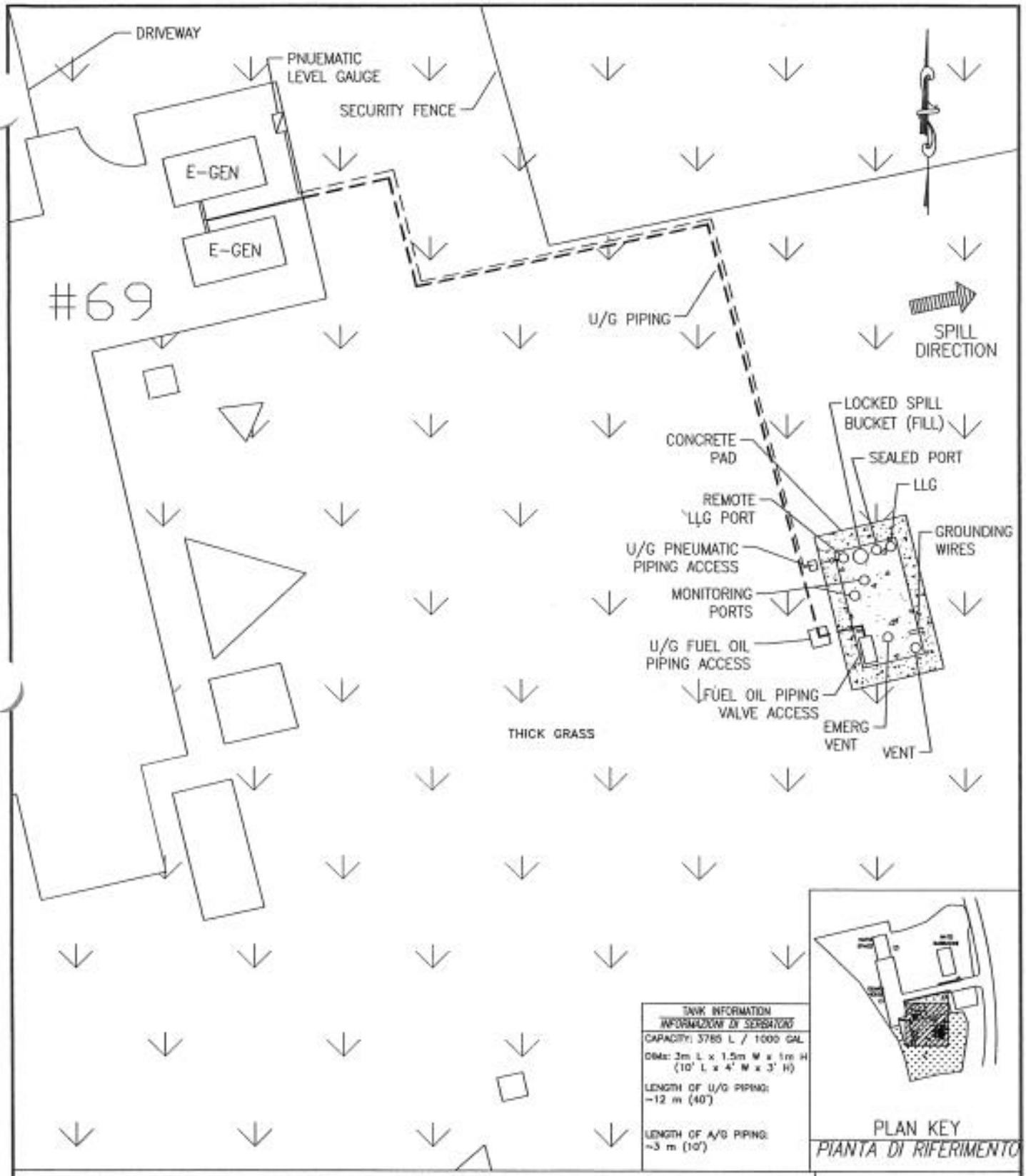


AST C-449
BEQ – BLDG #449
NSA NAPLES, ITALY
CAPODICHINO

FIGURE NO.

SCALE: (NTS)

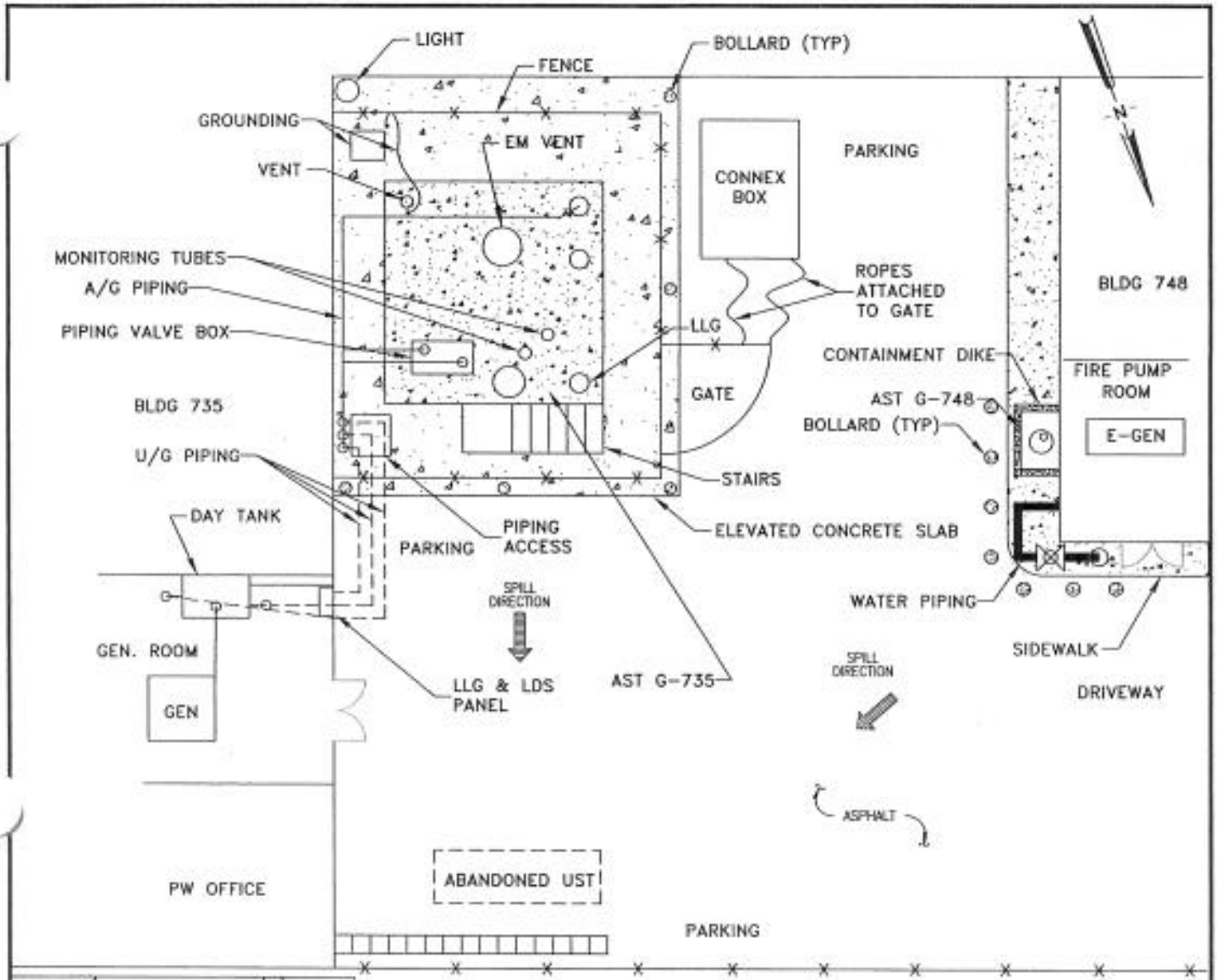
Baker
ChallengeUs.

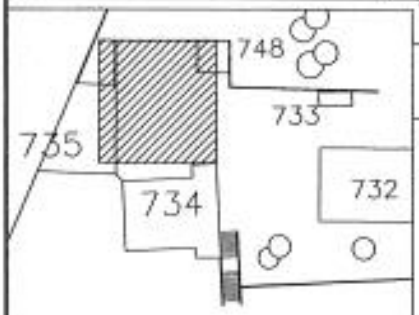


AST CM-69
REPEATER SITE-BLDG #69
NSA NAPLES, ITALY
MT. CAMALDOLI

SCALE: (NTS)

Baker
ChallengeUs.





PLAN KEY

PIANTA DI RIFERIMENTO

TANK INFORMATION (G-735) *INFORMAZIONI DI SERBATOIO*	TANK INFORMATION (G-748) *INFORMAZIONI DI SERBATOIO*
CAPACITY: 5678 L / 1500 GAL	CAPACITY: 800 L / 200 GAL
DIMs: 3.4m L x 2.5m W x 2.2m H (11' L x 8' W x 7' H)	DIMs: 1 m D x 1 m L (3' D x 3' L)
LENGTH OF U/G PIPING: ~6 m (~20')	LENGTH OF U/G PIPING: N/A
LENGTH OF A/G PIPING: ~7 m (~25')	LENGTH OF A/G PIPING: ~3 m (~10')

ASTs G-735/748
PUBLIC WORKS-BLDG #735
FIRE DEPT PUMP HOUSE-BLDG #748
NSA NAPLES, ITALY

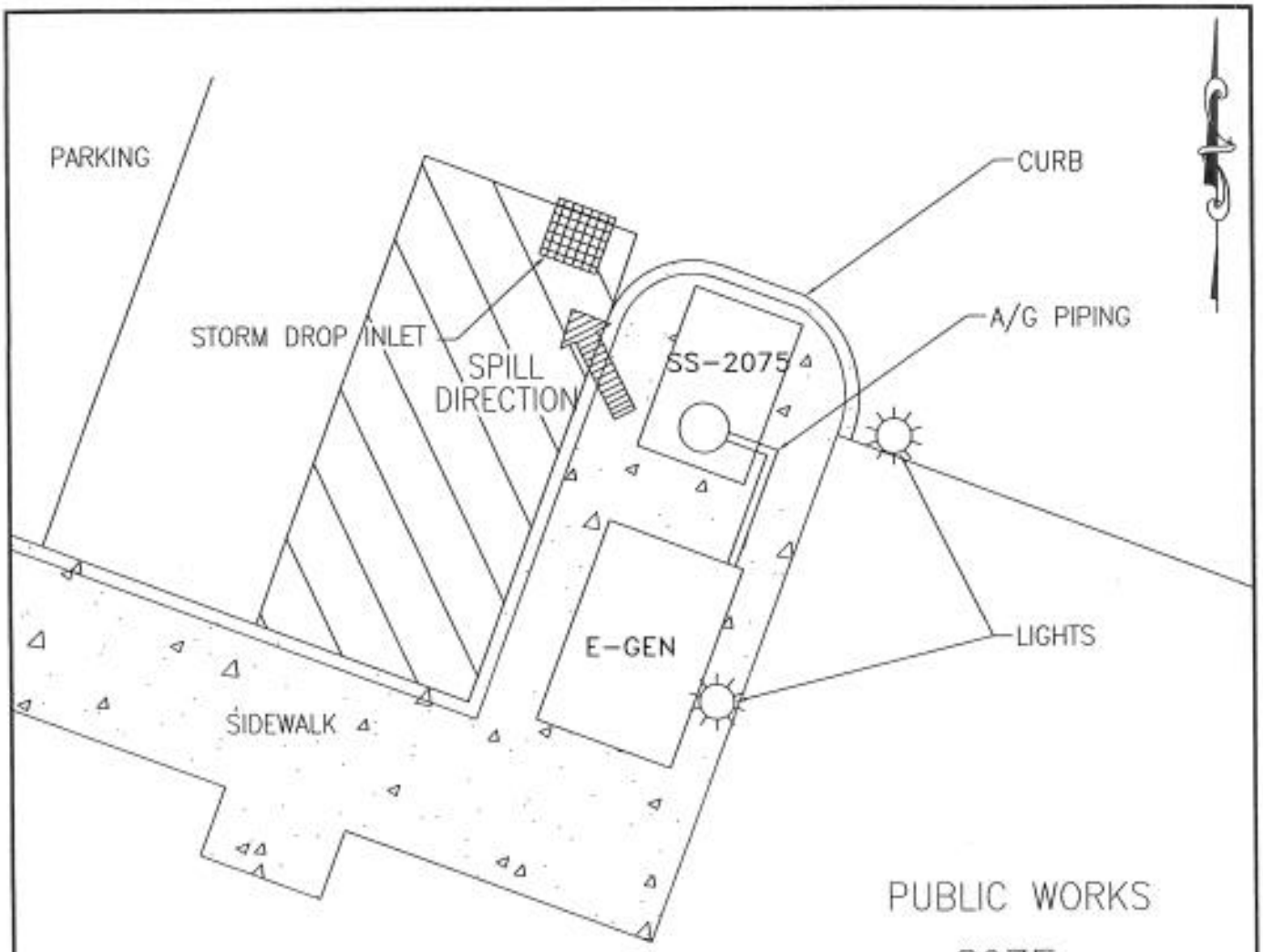
GAETA

FIGURE NO.

SCALE: (NTS)

Baker

ChallengeUs.



TANK INFORMATION
INFORMAZIONI DI SERBATOIO

CAPACITY: 1300 L / 345 GAL

DIMs: ø1m X 1.75m (L)
[ø3' X 5.5' (L)]

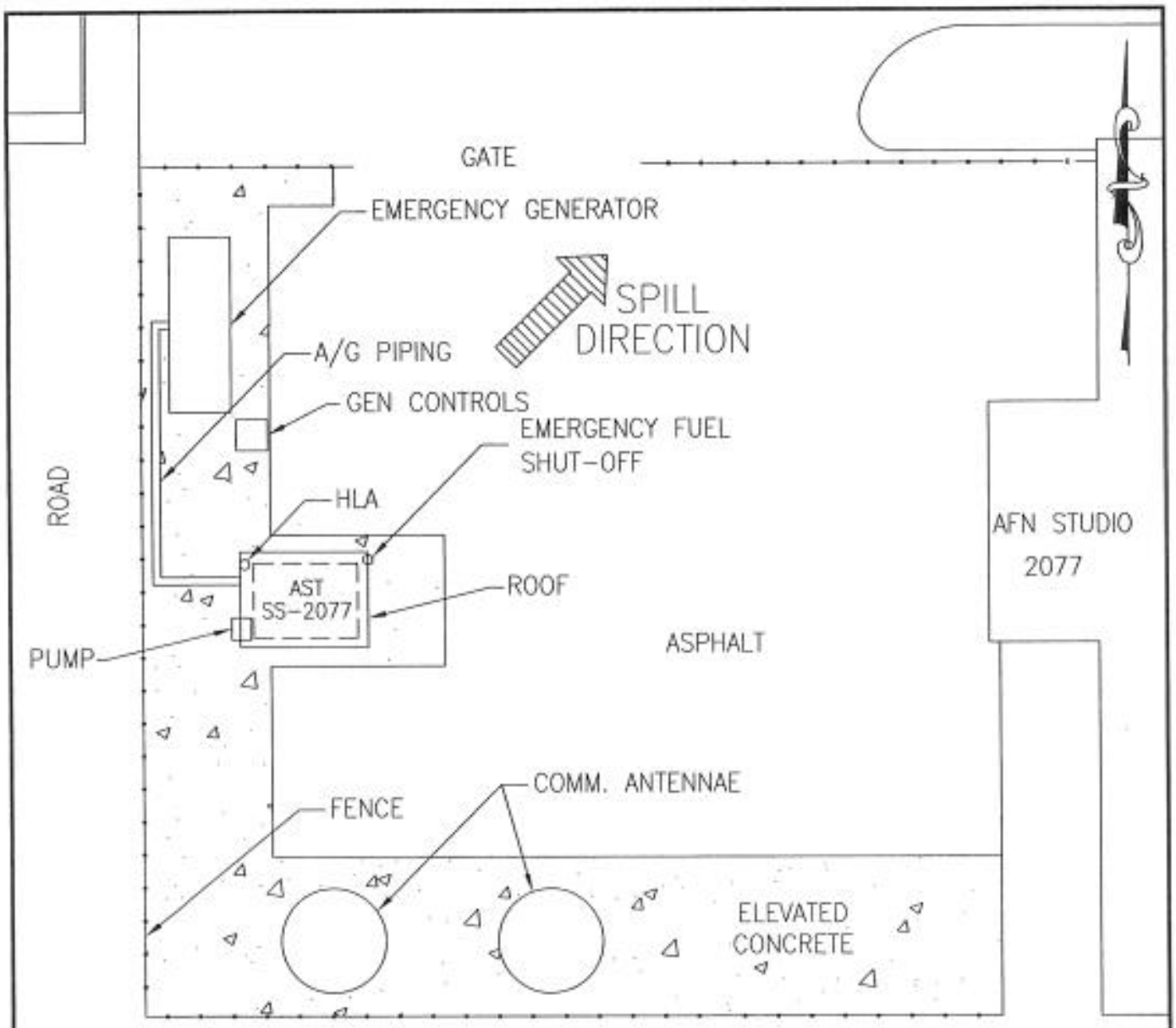
LENGTH OF U/G PIPING:
N/A

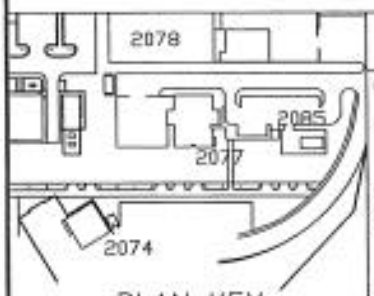
LENGTH OF A/G PIPING:
~0.75m (~3')

AST SS-2075
PUBLIC WORKS-BLDG #2075
NSA NAPLES, ITALY
SUPPORT SITE

SCALE: (NTS)

Baker
ChallengeUs.





PLAN KEY

PIANTA DI RIFERIMENTO

TANK INFORMATION

INFORMAZIONI DI SERBATOIO

CAPACITY: 5000 L / 1320 GAL

DIMs: ø1.675m X 2.135m (L)
[ø5.5' X 7' (L)]

LENGTH OF U/G PIPING:
N/A

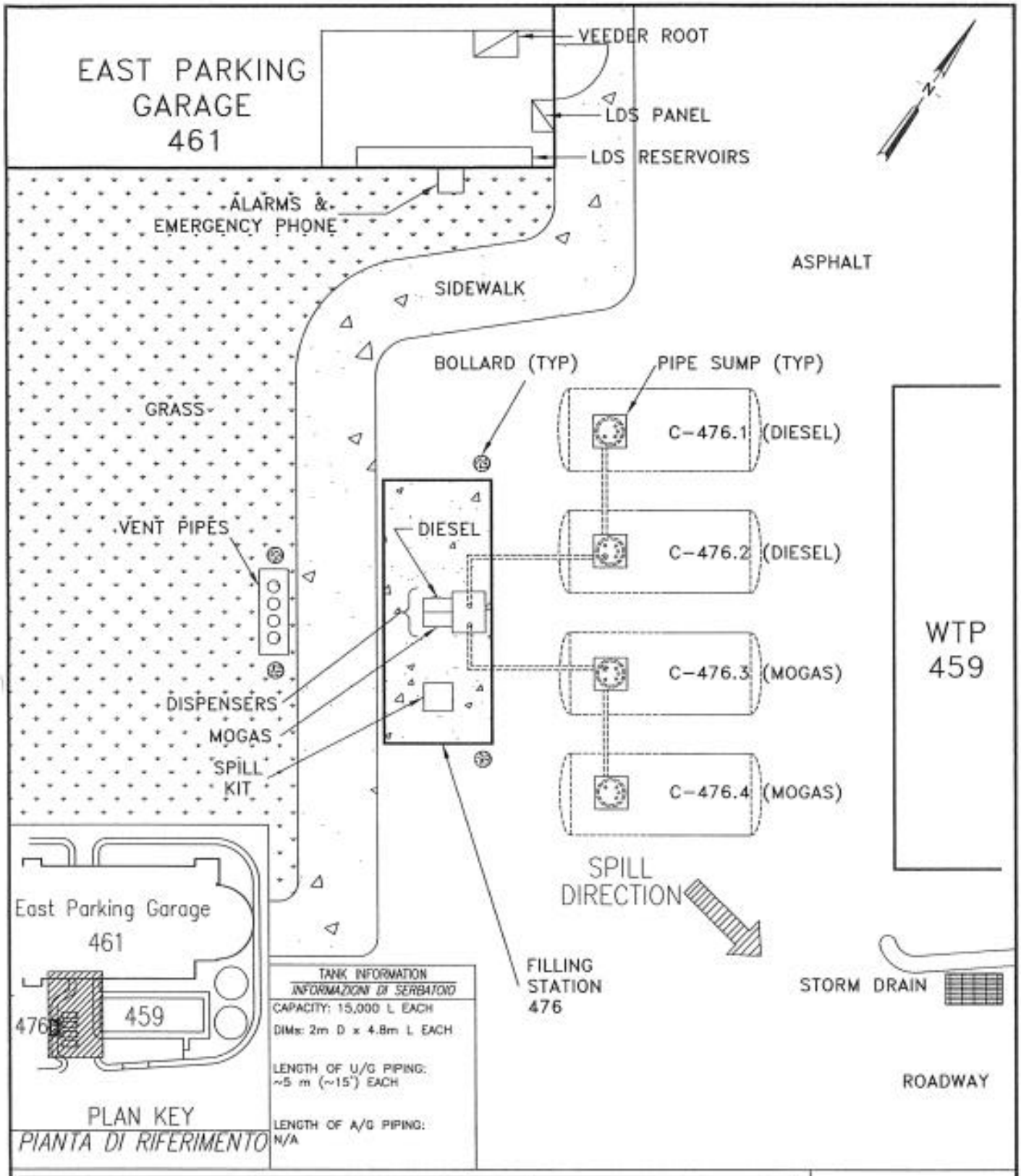
LENGTH OF A/G PIPING:
~6 m (~20')

AST SS-2077
AFN STUDIO-BLDG #2077
NSA NAPLES, ITALY
SUPPORT SITE

SCALE: (NTS)

Baker

ChallengeUs.



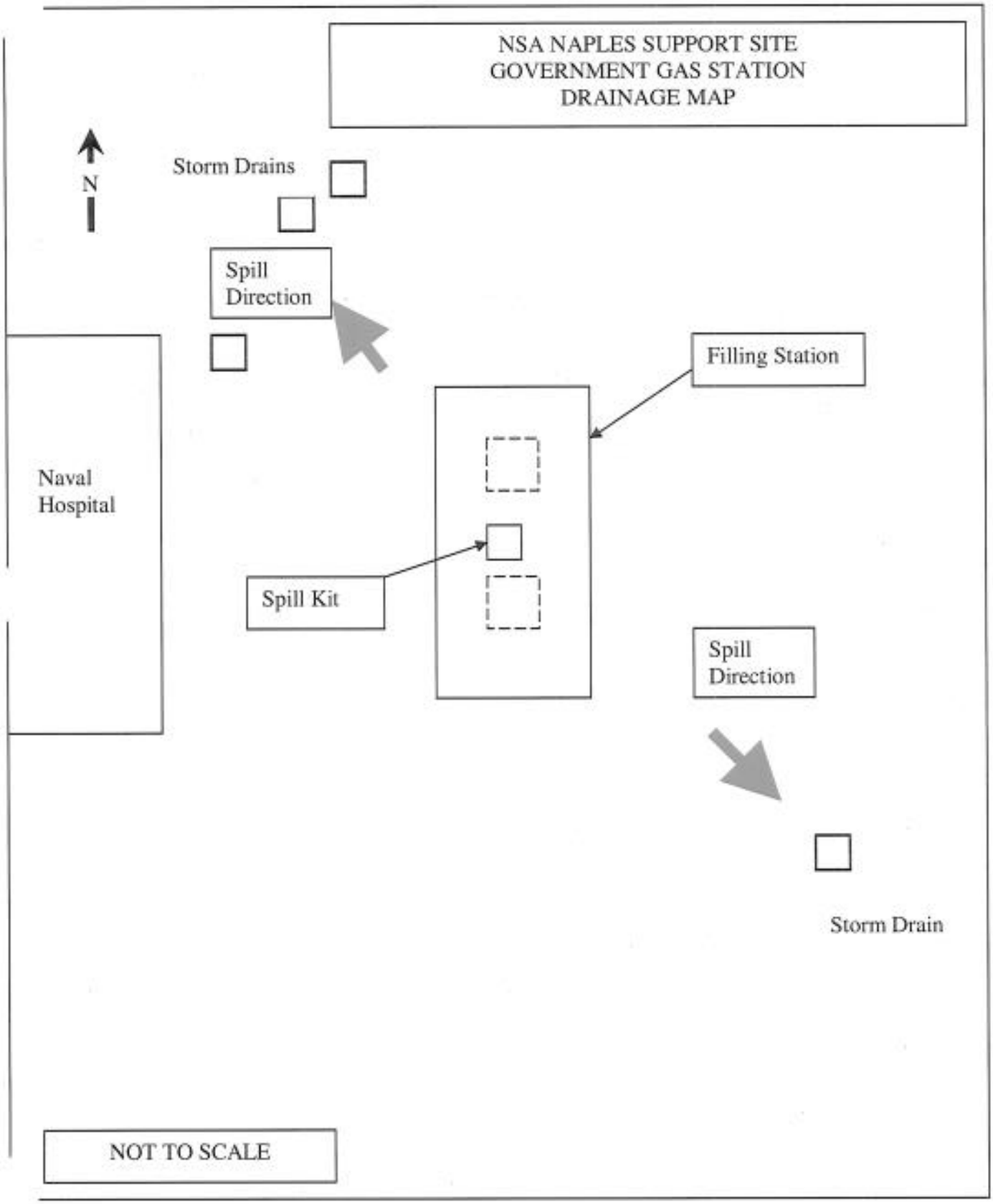
USTs C-476.1-4
FILLING STATION-BLDG #476
NSA NAPLES, ITALY
CAPODICHINO

FIGURE NO.

SCALE: (NTS)

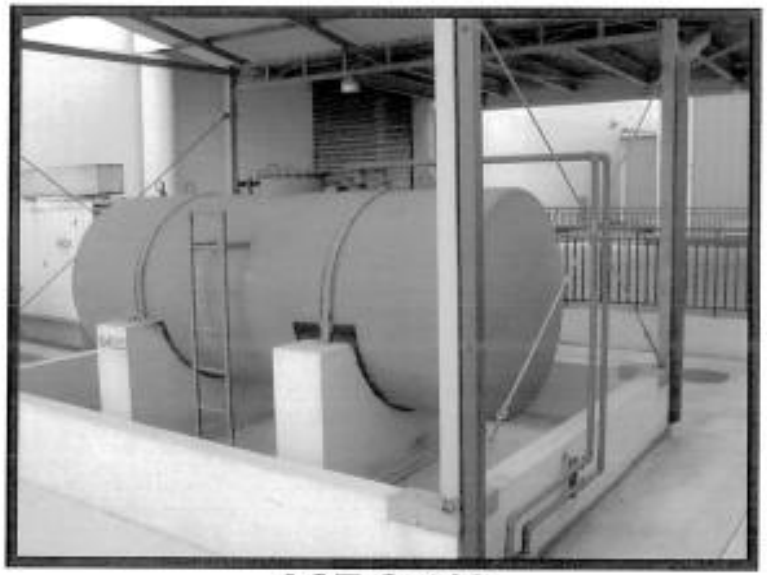
Baker

ChallengeUs.


NSA NAPLES SUPPORT SITE
GOVERNMENT GAS STATION
DRAINAGE MAP
N
Storm Drains
Spill
Direction
Naval
Hospital
Filling Station
Spill Kit
Spill
Direction
Storm Drain
NOT TO SCALE

NSA Naples SPCR Photo Album

Capodichino



AST C-412

AST C-412 Piping to Generator

USTs C-476.1, 2,3, 4

Capo AST C-447A BEQ III

Capo C4I Generator Day tank

Capo C4I HW/DW Storage

Capo C4I DW Storage

Capo C4I Spill Kit

Capo TDW BLDG 402

Capo TDW BLDG 402

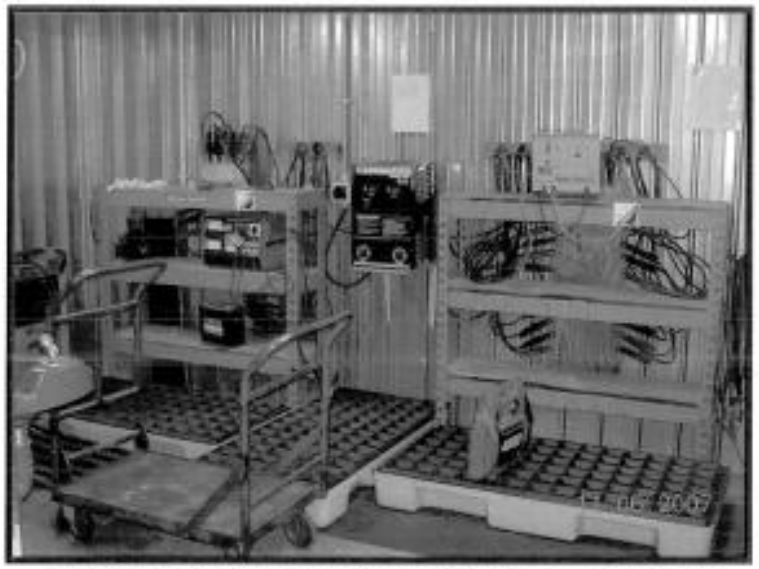
Capo TDW BLDG 402

Capo TDW BLDG 402

Capo PW Transportation HWAP

PW Transportation Lube Oil Dispensers

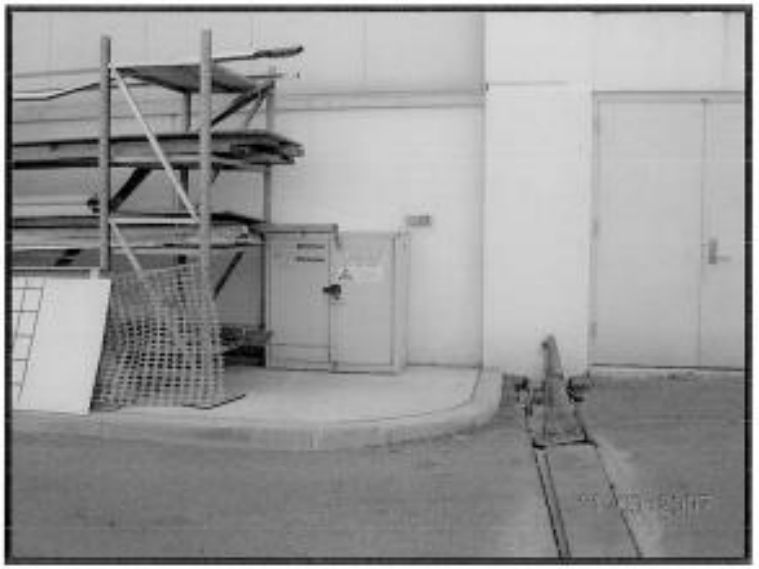
PW Transportation Lube Oil Storage



PW Transportation Battery Room

PW Transportation Fuel Truck

PW HM Storage



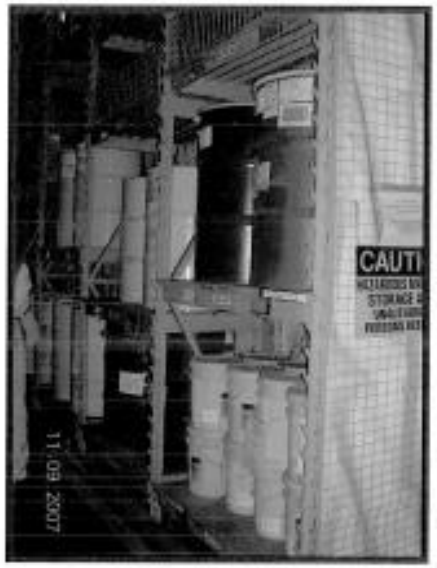
PW Transportation Seebee HM Locker

PW HM Storage

Capo Supply HM Storage BLDG 401

Capo Supply HM Storage

Capo Supply HM Storage



Capo Supply HM Storage

Capo CHRIMP

Capo CHRIMP

Capo CHRIMP AP

Capo CHRIMP Spill Response Supplies Storage

Capo CHRIMP Spill Response Supplies

Capo CHRIMP Spill Response Supplies

Capo CHRIMP

Capo CHRIMP Storm Drain

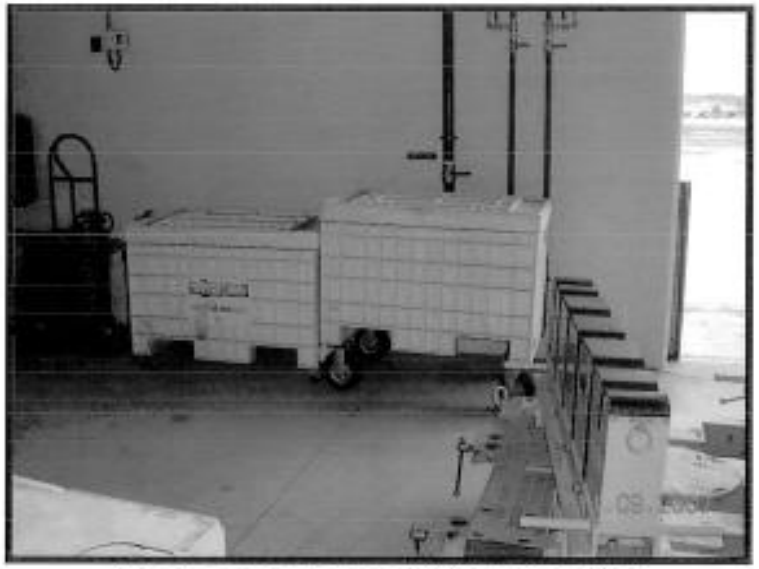
Capo Hangar Aircraft Maintenance Contractor HM Storage

Capo Hangar Aircraft Maintenance Contractor HM Storage

Capo Hangar SE HM Storage

Capo Hangar 406 AP

Capo Hangar 406 AFFF collection
Trench and Separator

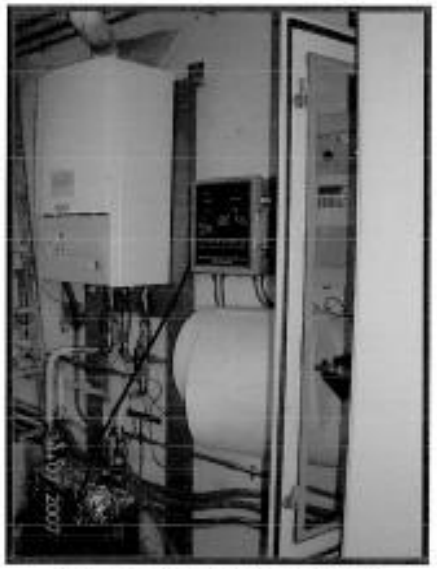


Capo Hangar 406 Spill Kit

Treatment Plant
HM Storage

Capo Water Treatment Plant
Eyewash/Shower

Capo Jacuzzi HM Storage Room



Capo Jacuzzi HM Storage Room

Capo Swimming Pool HM Storage

Carney Park

Capo Swimming Pool HM Storage

AST CP-528

CP Building 516 HM Storage Lockers

CP Building 516 HM storage Locker

CP Building 516 HM Storage Locker

CP Building 516 HS Locker

CP Building 516 HWAP

CP Building 516 HWAP

CP Golf Course HM Locker

Flammable Storage

CP Golf Course HM Storage

CP Golf Course Spill Kit

CP Golf Course future location of ASTs

Support Site

DODDS Chemistry Lab HM Storage

DODDS Chemistry Lab HM Storage

DODDS Chemistry Lab HM Fridge Storage

DODDS Chemistry Lab HM Fridge Storage

DODDS Chemistry Lab HM Storage

DODDS Chemistry Lab HM Storage

DODDS Chemistry Lab HM Storage

DODDS Eyewash/Shower

SS Hospital Generator Building HM Lockers

SS Hospital Generator Building HM Lockers

SS Hospital HM Lockers

SS Hospital Med Waste Locker

SS Hospital HM Locker

SS Hospital HM Locker

SS Hospital HM Locker

SS Hobby Shop HWAP

SS Hobby Shop HWAP

SS Hobby Shop HWAP

SS Hobby Shop HWAP

SS Hobby Shop HM

SS Hobby Shop HWAP

SS Hobby shop drainage 2

SS Hobby shop drainage

SS Hobby Shop General

SS Hobby Shop Oil Storage

SS Hobby Shop Battery Storage

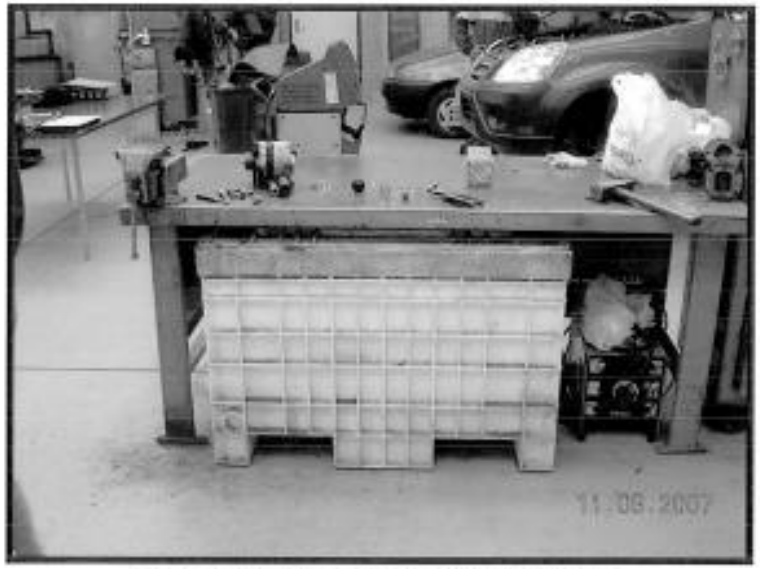
SS Hobby Shop Battery Storage

SS NEX Autoport

SS NEX Autoport HM Storage

SS NEX Autoport HWAP

SS NEX Autoport
eyewash/shower



SS NEX Autoport Spill Kit

SS Swimming Pool HM storage

SS Swimming Pool HM storage

SS Swimming Pool HM Storage

SS PW AST SS-2075

SS AFN AST SS-2077

Gaeta

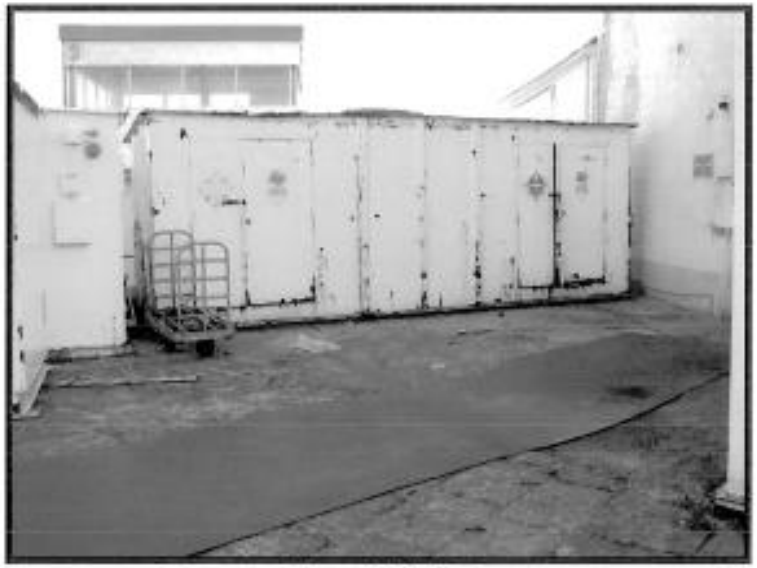
Gaeta AST G-735

Gaeta AST G-748

Gaeta AST G-736

Gaeta Pier area

Gaeta Pier Pipelines



Gaeta Pier HM Storage

Gaeta Pier HM Storage

Camaldoli

Mt Camaldoli AST CM-69

Teverola Warehouse

Teverola HS Storage

Teverola HS Storage 1

Baker

APPENDIX I

SMT ICS Job Aids & Responsibilities

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SMT Staff Checklists

COMMAND STAFF

Facility Incident Commander	
Completed	**Duties/Responsibilities**
	Manage overall response operations.
	Obtain initial incident briefing from the Initial Response Team Leader.
	Determine the nature of the incident, the threat posed by the incident, and the appropriate level of response.
	Ensure that personnel safety is accorded the highest priority throughout the entire response.
	Develop strategic objectives and response priorities to guide response operations. [These objectives must be forwarded to the Operations and Planning Sections for inclusion in Incident Action Plans].
	Approve/authorize the implementation of Incident Action Plans.
	Serve as the primary contact with the Host Nation.
	Review and approve resource allocations requested by the Section Chiefs.
	Monitor and evaluate the effectiveness of response operations and make adjustments to response strategies as necessary.
	Serve as the primary spokesperson with the news media.
	Review/approve press releases and statements.
	Approve requests for outside resources.
	Approve Demobilization Plan.
	Ensure that response actions are documented.
	Obtain an initial briefing from the FIC and attend daily planning/briefing meetings.
	Coordinate the preparation of the initial incident briefing form.
	Conduct planning meeting and coordinate with the Operations/Planning Section Chief.
	Provide information on manpower, equipment, and materials for Command Staff operations to the Logistics Section Chief.
	Assist the FIC in the development of strategic objectives and response priorities.
	Coordinate the activities of the section chiefs to ensure the safe, efficient, and effective implementation of the Incident Action Plans.
	Coordinate with the Safety Manager to ensure the safety of response personnel.
	Provide the FIC with regular briefings on the status of response operations.
	Ensure that each section chief documents the actions of his/her section and that this documentation is forwarded to the Operations/Planning Section.
	Coordinate with the Public Affairs and Host Nation Liaison Officer to ensure that a steady, accurate flow of information is maintained.
	Coordinate rescue, salvage, and cleanup operations.
	Resolve conflicts that may arise during response operations.
	Conduct periodic surveys of the response.

SAFETY OFFICER	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from the FIC and attend periodic planning/briefing meetings.
	Provide FIC with information on manpower, equipment, and material needs.
	Provide Operations/Planning Section Chief with safety information for Incident Action Plans. — Description of safety hazards/risks — Measures to avoid/mitigate safety hazards/risks.
	Develop/issue safety bulletins and guidelines during the response.
	Brief safety staff on the contents of Incident Action Plans. — Verify that staff has most current plan — Make/verify assignment — Establish/review reporting requirements.
	Ensure compliance with relevant regulations.
	Assess the need for assistance from local emergency rescue units.
	Evaluate the need for an evacuation of response personnel/nearby residents.
	Coordinate the evaluation of field operations with Operations/Planning Section Chief to ensure that appropriate safety guidelines are developed.
	Coordinate personal protective equipment needs with Logistics section chief.
	Establish a system to recognize and eliminate safety hazards during response operations.
	Exercise emergency authority to prevent/stop unsafe operations.
	Investigate, report, record, and recommend corrective actions for all safety-related accidents that occur during response operations.
	Notify, through the Italian Navy Liaison, appropriate Host Nation safety-related incidents.
	Coordinate with Medical Official to identify locations for first aid stations and enforce industrial hygiene standards.
	Document all actions.

HN (Italian) LIAISON OFFICER	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from FIC and attend daily planning/briefing meetings.
	Brief Host Nation Liaison staff on contents of Incident Action Plans. — Verify that staff has most current plan — Make/verify assignments — Establish/review reporting requirement.
	Make contact with Italian government representatives for those threatened and/or affected areas; provide information on the incident/response status.
	Coordinate with the Public Affairs Officer; ensure that a steady, accurate flow of information is maintained to Host Nation.
	Provide Public Affairs Officer with the contact list and telephone numbers for all government agencies.
	Assist/represent (as directed) the FIC at meetings with Host Nation National, Regional, and local government representatives.
	Relay information from government representatives to the NOSC, FIC and section chiefs.
	Assist the Operations/Planning Section in obtaining Host Nation government agency approvals/permits required for response operations.
	Maintain a record/log of contacts with Host Nation government representatives.
	Document all actions.

PAO	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from FIC and attend planning/briefing meetings
	Provide FIC with manpower, equipment and material needs.
	Brief Public Affairs staff on contents of Incident Action Plans. — Verify that staff has most current plan — Make/verify assignments — Establish/review reporting requirement.
	Serve as the principal advisor to the FIC on all matters relating to external communications.
	Advise the FIC about the public and community relations impact(s) of the response operations.
	Coordinate with the FIC and the Staff Judge Advocate to establish incident specific public relations guidelines and distribute to all response team members.
	Establish lines of communications with local press, radio, and TV; national/international media representatives; concerned citizens' groups; and other public organizations.
	Contact Navy Media Center, Naples for video support and emergency broadcasting capability.
	Coordinate with the Operations and Planning Section Chiefs to ensure access to complete, accurate, and up-to-date information on the nature and status of response operations.
	Monitor media coverage of the response and provide follow-up information when necessary. Activate any local radio or TV coverage in CP.
	Be available to answer on-the-spot media inquiries.
	Prepare public statements, press releases, and fact sheets for approval of the FIC.
	Arrange news conferences, media briefings, interviews press tours, etc., for reporters, community groups/leaders, and others as directed by the FIC.
	Arrange VIP briefings/tours for Host Nation representatives.
	Establish a press room.
	Maintain a record of newspaper articles, radio and television broadcasts, press conferences, and press briefings.
	Document all actions.

STAFF JUDGE ADVOCATE	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from FIC and attend planning/briefing meetings.
	Provide FIC with manpower, equipment and material needs.
	Brief Legal staff on contents of Incident Action Plans. — Verify that staff has most current plan — Make/verify assignments — Establish/review reporting requirement.
	Review policies, practices, and procedures related to response operations.
	Identify and address legal issues that may arise from or are associated with response operations.
	Coordinate the conduct of all damage assessment programs with the Operations/Planning Section Chief.
	Advise FIC and Operations and Planning Section Chief on legal matters related to the response.
	Advise FIC and Section Chiefs on the type of documentation that must be compiled and retained to support incident potential litigation and/or claims.
	As directed by the FIC, review press releases and/or statements prior to issuance.
	As directed by the FIC, review contracts issued by Logistics section before execution.
	Provide Operations and Planning Sections with legal counsel concerning response operations, particularly in operations that require regulatory agency approvals and/or permits.
	Coordinate establishment of Claims process with NLSO and Finance/Admin Section Chief.
	Ensure that guidelines are established concerning/limiting communications related to liability or fault.
	Supervise the activities of outside legal counsel.
	Document all actions.

Medical Officer	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from FIC and OSIC, attend briefing meetings.
	Provide Logistics Section Chief with information on manpower, equipment, and material needs for unit operations.
	Provide Logistics Section Chief with information for the medical/health portion Incident Action Plans: -Description of major medical/health hazards and risks -Measures to avoid or mitigate medical/health hazards and risks.
	Prepare Medical Plans for inclusion in Incident Action Plans, coordinating efforts with the Medical Officer.
	Establish procedures for handling medical emergencies.
	Coordinate with Transportation, Air Operations, and Communications Unit Leader to establish a transportation system and communications network to handle medical emergencies.
	Coordinate with Safety Officer to locate, establish, and man first aid field stations.
	Maintain inventory of medical supplies and disburse as needed.
	Ensure that medical response personnel, equipment, and facilities are available to pickup, transport, treat and care for injured personnel.
	Notify Support Services Unit Leader of all injuries/fatalities.
	Develop and maintain a record of all accidents/injuries/fatalities.
	Notify appropriate agencies of all medical/health/related accidents, incident, and/or problems and provide Logistics Section Chief with information on all regulatory agency contacts...
	Document all actions.

OPERATIONS SECTION

Operations Section Chief	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from FIC; attend planning/briefing meetings.
	Conduct briefings with Operations Section personnel.
	Provide information on manpower, equipment, and material needs to Logistics Section Chief.
	Conduct tactical operations planning meetings and supervise the development and distribution of tactical operations plans. • Review strategic objectives and response priorities • Obtain summary of current response actions • Obtain summary of resource utilization • Devise response strategies • Prepare/post Operations Section Organizational Chart.
	• Brief Operations/Planning Section personnel on contents of Incident Action Plans • Verify that section personnel have most current plan • Identify Field Supervisors • Make/verify field assignments • Establish/review reporting requirements.
	Ensure section personnel comply with Site-Specific Health & Safety Plan.
	Ensure section personnel have the equipment and materials to carry out response operations in a safe, efficient, and effective manner.
	Ensure that personnel are aware of and follow all policies and directives.
	Obtain up-to-date surveillance information.
	Ensure that the concerns of Italian Government and impacted communities are adequately addressed when formulating and executing response strategies.
	Provide regular briefings to the FIC about the nature and status of rescue, salvage, and spill cleanup operations.
	Provide Planning and Public Affairs Officer with accurate, up-to-date information on the nature and status of rescue, salvage and cleanup operations.
	Coordinate response operations with other response resources (e.g., Italian Navy, oil spill response organizations, and specialized service companies).
	Initiate recommended releases/reassignment of equipment and/or personnel when resources are no longer needed.
	Provide Planning/Operations/Logistics Section Chief with information on manpower, equipment, and material needs for Operations Section.

Protection and Recovery Branch Director	
Completed	**Duties/Responsibilities**
	Identify and obtain the manpower, equipment, and materials needed for shoreline protection operations.
	Evaluate effectiveness of shoreline protection techniques; adjust techniques and/or equipment as necessary to enhance effectiveness.
	Obtain initial briefing from Operations/Planning Section Chief and attend daily tactical operations planning meetings and briefing meetings.
	Provide Operations/Planning Section Chief with information on manpower, equipment, and material needs for unit operations.
	Provide Environmental Planning Branch with information for Situation Status Reports and the onshore response section for the tactical operations portion of Incident Action Plans: • Summary of current actions • Identification of the amount and type of onshore area(s) affected and degree of contamination • Identification of area(s) to be protected/cleaned • Identification of response technique(s) to be employed • List of equipment to be used • List of personnel resources to be used.
	Obtain weather forecasts from Operations/Planning Section Chief.
	Coordinate with Environmental Planning Branch to develop an overall Shoreline Response Plan and submit completed plan to Operations/Planning Section Chief.
	Establish zones of operations.

Protection and Recovery Branch Director (CONTINUED)	
Completed	**Duties/Responsibilities**
	Identify staging base(s) and support services.
	Coordinate with Planning to identify appropriate shoreline response techniques.
	Identify and arrange to obtain heavy equipment, containment booms, recovery equipment, pressure washers, pumps, absorbent materials, and any other equipment needed to contain and recover spilled material.
	Assign Field Supervisor and develop a method to receive regular progress reports.
	Ensure that all personnel comply with the Site-Specific Health & Safety Plan.
	Evaluate effectiveness of shoreline response techniques; adjust techniques and/or equipment as necessary to enhance effectiveness.
	Approve changes to Shoreline Response Plan; provide updated/modified plan to Operations/Planning Section Chief.
	Provide Operations and Planning Section Chiefs with information on nature and quantity of liquid/solid/hazardous wastes generated during onshore cleanup operations.
	Provide Operations/Planning Section Chief with recommendations on the timing of the release of equipment and/or personnel resources.
	Provide Operations/Planning Section Chief with information on all regulatory agency contacts.
	Provide Operations/Planning Section Chief with information on all special incidents and/or accidents.
	Coordinate with Environmental Planning Branch leader to collect and present environmental information required to support waste management permit applications.
	Assign Field Supervisors and receive regular progress reports.
	Ensure that all personnel comply with the Site-Specific Health & Safety Plan.
	Document all actions.

On-Water Recovery Group Supervisor	
Completed	**Duties/Responsibilities**
	Implement recovery strategies in Incident Action Plan and as directed by the Operations Section Chief.
	Direct, coordinate, and assess effectiveness of on-water strategy actions.
	Modify actions, as needed.
	Monitor tides, winds, and spill trajectories.
	Anticipate resource shortfalls; notify Recovery and Protection Branch Director as known.
	Identify waste disposal requirements, including temporary storage.
	Coordinate actions with other Group Supervisors.
	Brief the Recovery and Protection Branch Director on activities.
	Document all actions.

Protection Group Supervisor	
Completed	**Duties/Responsibilities**
	Implement Protection Strategies in Incident Action Plan and as directed by the Protection and Response Branch Director.
	Direct, coordinate, and assess effectiveness of protective actions
	Modify protective actions, as needed.
	Identify waste management requirements and establish on-site procedures.
	Assess resources and identify any shortfalls as soon as possible; brief Protection and Recovery Branch Director.
	Brief the Recovery and Protection Branch Director on activities.
	Document all actions.

Shore-side Clean-up Group Supervisor	
Completed	**Duties/Responsibilities**
	Implement recovery strategies in Incident Action Plan.
	Direct, coordinate, and assess effectiveness of on-water recovery actions.
	Modify recovery actions, as needed.
	Anticipate resource shortfalls and notify Branch Director.
	Ensure site safety requirements for workers is followed. Manage PPE requirements.
	Establish efficient waste collection and disposal procedures; coordinate with Disposal Group Supervisor.
	Modify recovery actions, as needed.
	Document all actions

Disposal Group Supervisor	
Completed	**Duties/Responsibilities**
	Receive briefing from Protection and Recovery Branch Director.
	Implement disposal portion of Incident Action Plan, and as required by field operations.
	Ensure compliance with all hazardous waste laws and regulations.
	Coordinate waste management requirements with all Group Supervisors.
	Develop waste management plan with Waste Management Specialists.
	Maintain accurate records of recovered materials.
	Identify temporary storage capabilities and any shortfalls; brief the Protection and Recovery Director.
	Brief Recovery and Protection Branch Director on activities.
	Ensure all personnel handling waste have proper PPE.

SECURITY BRANCH DIRECTOR	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from Logistics Section Chief and attend daily briefing meetings.
	Provide Logistics Section Chief with information on the manpower, equipment, and material needs for unit operations.
	Coordinate with section chiefs to identify security needs.
	Arrange for security at the following locations: • Command Center • Communications center(s) and facilities • Staging area(s) • Warehouse(s) • Other facilities as required.
	Establish a procedure to ensure rapid access to secured facilities for authorized personnel.
	Maintain a record of all visitors to secured facilities.
	Arrange for security escorts for visitors.
	Coordinate security operations with Italian authorities and other U.S. DOD personnel.
	Arrange for the use of additional security personnel as required.
	Coordinate any evacuation or traffic re-routing.
	Document all actions.

PLANNING SECTION

Planning Section Chief	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from Operations/Planning Section Chief, attend daily planning meetings, and conduct briefing meetings with section personnel.
	Supervise the preparation of Incident Action Plans.
	Brief team members on the contents of Incident Action Plans and other matters related to section operations: • Verify that section personnel have most recent plan • Make/verify assignments • Establish/review reporting requirements.
	Ensure that systems and lines of communication are established that will facilitate the preparation and distribution of Incident Action Plans.
	Ensure that any incident-specific plans, reports, or other documents required by the FIC and/or host nation agencies during or following the completion of response operations are compiled in a timely, efficient, and satisfactory manner.
	Ensure that systems are established that will facilitate the collection, evaluation, analysis, and dissemination of environmental, cultural, and social information and data. In the event of an oil/hazardous substance spill, this may include information on slick movements, potential spill-related impacts to environmentally sensitive areas, and air and water quality considerations.
	Advise Operations Section Chief on all environmental issues relating to response operations
	Ensure compliance with all environmental requirements and communication of these requirements to the Operations and Planning Section Chiefs.
	Ensure systems are established that will facilitate the collection, analysis, verification, and dissemination of information on the status of response resources and operations.

Planning Section Chief (Continued)	
Completed	**Duties/Responsibilities**
	Provide Public Affairs Officer with accurate, up-to-date information which may include: • Paths and effects of spilled oil/hazardous substances • Location of spilled oil/hazardous substances • Impacts (including potential impacts) People Environment Property • Status of evacuation operations • Status of firefighting operations • Weather and other site conditions • Types and number of wildlife affected by the incident • Status of wildlife rehabilitation efforts • Summaries of response operations.
	Supervise the compilation of environmental information necessary to obtain regulatory agency approvals.
	Coordinate with Section Chiefs and Command Staff to gather information for Incident Action Plans including: • Cover page • Incident objectives and response priorities • Health and Safety message • Section assignments • Division/group assignments • Environmental Operations plan • Communications plan • Air Operations plan • Medical plan.
	Collect and maintain baseline environmental data from potentially affected areas.
	Distribute Incident Action Plans.
	Assist Legal Officer with development of Documentation Guidelines for distribution to appropriate response personnel.

Documentation Unit Leader	
	Distribute copies of incident documents to appropriate response personnel, including Command Staff.
	Coordinate with all Command Staff and Functional Sections for documentation support.
	Direct the organization, maintenance, and storage of incident files in a convenient, secure location.
	Ensure that duplication services are available for the incident.
	Supervise the duplication and filing of all official forms and reports.
	Prepare Environmental Operations Plans for inclusion in Incident Action Plans.
	Ensure that duplication services are available for the incident.
	Supervise the duplication and filing of all official forms and reports.
	Prepare Environmental Operations Plans for inclusion in Incident Action Plans.

Situation Unit Leader	
Completed	**Duties/Responsibilities**
	Obtain briefing and special instructions from the Planning Section Chief.
	Participate in planning meetings, as required.
	Prepare and maintain Incident Situation Display.
	Collect and maintain current incident data.
	Prepare periodic predictions, as requested by the Planning Section Chief.
	Prepare, post, and disseminate resource and situation status information, as required in the Incident Information Center.
	Prepare the Incident Status Summary (ICS 209).
	Provide status reports to appropriate requesters.
	Provide photographic services and maps.
	Ensure that duplication services are available for the incident.
	Supervise the duplication and filing of all official forms and reports.
	Prepare Environmental Operations Plans for inclusion in Incident Action Plans.

Waste Management Specialist	
	Prepare and submit a Waste Management Plan to the Operations and Planning Section Chiefs.
	Coordinate with DRMO and Spanish Liaison Officer to obtain all necessary waste management permits and approvals.
	Provide Operations/Planning Section Chief with recommendations on methods that can be applied to minimize the generation of wastes during response operations.
	Develop a system for the segregation of wastes to assist in storage, treatment, and disposal operations.
	Document all actions.

Environmental Unit Leader	
Completed	**Duties/Responsibilities**
	Provide Operations and Planning Section Chiefs with information on the potential environmental impacts of response operations.
	Supervise the compilation of environmental information to support required regulatory approvals.
	Coordinate/assist with drafting of all Naval Message notifications and Press releases.
	Be familiar with existing environmental regulations and restrictions within an incident area.
	Coordinate with Host Nation Liaison Officer to obtain necessary regulatory approvals for environmentally related permits and approvals.
	Provide Operations and Planning Section Chiefs with information on the manpower, equipment, and materials needed to carry out waste collection, transportation, storage, treatment, and disposal operations.
	Coordinate with regulatory agencies through the Host Nation Liaison Officer to identify environmentally sensitive areas and wildlife habitats...
	Coordinate wildlife rescue and rehabilitation operations with appropriate Host Nation agencies.
	Prioritize sensitive habitat areas for protection and/or cleanup operations.
	Provide advice on cleanup techniques that will minimize secondary impacts to affected wildlife and/or sensitive habitat areas.

LOGISTICS SECTION

Logistics Section Chief	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from FIC and attend planning meetings. Conduct briefings with Logistics Section personnel.
	Supervise preparation of logistic support and services portions of Incident Action Plans: • Make duty assignments • Prepare and post Logistics Section Organization Chart • Obtain summary of current actions • Equipment, materials, and services on scene and where they are located • Equipment, materials, and services *en route* and ETA.
	Provide logistic support and services information to Environmental Planning Branch leader for inclusion in Situation Status Reports.
	Brief section personnel on contents of Incident Action Plans and other matters related to section operations: • Verify that personnel have most current plan • Make/verify assignments • Establish/review reporting requirements.
	Coordinate with Operations and Planning Section Chiefs to identify and ensure the timely and efficient provisions of field support services including: • Evacuation vessels • Communications equipment • Berthing and/or housing • Decontamination units • Potable water • Food • Sanitary facilities • Fuel • Transportation for personnel and/or supplies (by various modes, i.e., air, ground, water) • Waste handling • Security services • Others.

Logistics Section Chief (CONTINUED)	
Completed	**Duties/Responsibilities**
	Ensure that logistics support and service needs are met in a timely and efficient manner and in a manner that maximizes personnel safety.
	Ensure that guidelines, procedures, forms, and data management systems necessary to manage the acquisition of equipment, the control inventory, and the accounting for expenditures are in place.
	Ensure that an overall inventory is maintained for all equipment and materials purchased, rented, borrowed, or otherwise obtained during the response operations.
	Ensure that necessary warehouse space is obtained to store equipment and materials.
	Ensure that programs are in place to inspect and service equipment, obtain and store spare parts, and repair or replace damaged or defective equipment.
	Ensure that records are maintained on equipment and services used materials and services provided, and contracts executed during response operations.
	Provide Operations/Planning Section with recommendations on the release timing of logistics service and support personnel resources and equipment.
	Document all actions.

Service Branch Director	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from Logistics Section Chief and attend briefing meetings.
	Provide Logistics Section Chief with information on manpower, equipment, and material needs for unit operations.
	Prepare Radio Communications Plan for Incident Action Plans.
	Obtain information for on-scene communications equipment, including: Channels, functions, frequencies, and assignments.
	Verify that existing communications equipment is operational and obtain additional communications equipment as needed to accommodate response operations.
	Coordinate with section chiefs to identify communications needs and ensure timely and efficient response to support operations.
	Arrange for the installation of an adequate telephone system in the Command Center.
	Establish a radio base system in the Command Center.
	Ensure the establishment and maintenance of a dedicated communication network that will allow for comprehensive communications.
	Schedule/track amount of time individuals are working and coordinate their replacements.
	Determine the food, potable water, and sanitation requirements for the response operations.
	Assess the conditions at each location and determine and arrange for the most appropriate food service method (e.g., restaurant, catering, mess hall, etc.).
	Coordinate with Logistics Section Chief to ensure that contracts are executed to obtain necessary equipment and supplies for food service at each location.
	Verify that potable water and well-balanced meals are being served at each location.
	Determine the lodging requirements for response personnel, assess the current availability of lodging services, and arrange lodging for response personnel as necessary.
	Coordinate with Facilities Unit Leader to establish temporary sleeping quarters on-site if necessary.
	Assess the need for sanitary facilities at all areas of operation.
	Provide Logistics Section Chief with information on equipment and materials for the logistics and services portion of Incident Action Plans: • Equipment and materials on-scene • Location(s) of equipment and materials • Equipment and materials en route and the ETA.
	Coordinate with section chiefs to determine equipment and material needs for each.

Support Branch Director	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from Logistics Section Chief and attend briefing meetings.
	Provide Logistics Section Chief with information on manpower, equipment, and material needs for unit operations.
	Develop and implement a purchasing plan to organize the acquisition of equipment, materials, and services required for response operations.
	Prepare guidelines, procedures, forms, and data management systems necessary to manage the acquisition of equipment, control inventory, and account for expenditures.
	Establish a system to keep track of equipment and materials that are *en route* to an incident scene including: • Date shipped • Shipment made • Shipment scheduled • Location and date of intermediate stops • Date due at final destination • Location of final destination.
	Activate existing contracts/agreements as needed to provide equipment, materials, and services for response operations and evaluate the need for additional contracts/ agreements.
	Prepare and process all necessary contracts and purchase/work orders.
	Contact sources of equipment and materials to obtain: • Accurate and up-to-date information on the type, quantity, and availability of equipment and materials • The conditions (new, reconditioned, or used) of equipment and materials • The terms and conditions for the purchase, lease, and/or rental of equipment and materials • How the equipment and materials will be shipped, where they will be delivered, and when will they arrive • Whether additional equipment and materials are needed to make ordered equipment and/or materials fully operational • The availability of technicians to explain the operation and maintenance of equipment and/or supplies The availability of spare parts.
	Coordinate the purchase of all equipment and materials with the Procurement Unit Leader.
	Establish an inventory system for equipment and materials stored in central receiving point(s).
	Establish a system to keep track of equipment and materials used during response operations.
	Document all actions.

FINANCE/ADMIN SECTION

Finance/Admin Section Chief	
Completed	
	Obtain initial briefing from FIC and attend daily planning meetings; conduct briefings with Finance Section personnel.
	Provide FIC with information on personnel, equipment, and material needs for section operations. Include establishment of other Groups/units as required.
	Brief Finance Section Personnel on contents of Incident Action Plans: • Verify that section personnel have most current plan • Make/verify assignments • Establish/review reporting requirements.
	Provide FIC with information on the financial implications of actions taken (to be taken) during response operations.
	Discuss/advise FIC and staff on issues regarding insurance coverage and exclusions, claims management processing, and settlements.
	Coordinate with Legal and NLSO on Claims and Compensation personnel.
	Make duty assignments and supervise operations of Finance Section.
	Facilitate the preparation and distribution of guidelines, procedures, forms, and the establishment of a data management system necessary to account for expenditures/claims made during response operations.
	Coordinate purchasing and accounting functions with Logistics Section.
	Supervise the development and administration of cash accounts.
	Ensure that purchase requisitions and work orders are prepared and processed in a timely manner.
	Verify that obligation documents initiated during response operations are properly prepared.
	Coordinate with auditors to ensure proper documentation of expenditures.
	Ensure appropriate cost and accounting control systems are established.
	Provide accounting function as directed, including: auditing; billing; and documenting labor, materials, and services used.
	Administer vendor contracts, and service and equipment rental agreements.
	Coordinate the investigation and processing of claims.
	Provide FIC and staff with regular financial reports.
	Document all actions.

Claims Unit Leader	
Completed	**Duties/Responsibilities**
	Obtain initial briefing from Finance Section Chief and attend daily briefing meetings.
	Provide Finance Section Chief with information on manpower, equipment, and material needs for unit operations.
	Coordinate with Claims and Compensation personnel to establish a system for the receipt, evaluation and processing of all claims.
	Determine the need for and location of claims offices.
	Receive advice from Finance Section Chief and Legal Officer during the processing of claims.
	Identify and obtain technical experts and contractors to assist in damage assessment and in the processing of claims.
	Establish and maintain contact with Finance, Safety Officer and Medical Officer as required to prepare and process reports on injuries/deaths caused by the spill incident or resulting from response operations.
	Follow the status of hospitalized personnel and coordinate/prepare required administrative records on all injuries and deaths.
	Provide Host Nation Liaison Officer, Finance Section Chief, and Public Affairs Officer with periodic reports on damage assessment/claims.
	Obtain initial briefing from Finance Section Chief and attend briefing meetings.
	Provide Finance Section Chief with information on manpower, equipment, and material needs for unit operations.
	Develop and implement an accounting system for response operations and maintain records of all accounting activities.
	Establish and maintain a cash account.
	Periodically add cost saving analyses.
	Ensure all accounting records and documents are prepared accurately.
	Maintain a cumulative cost/financial record.
	Serve as liaison with auditing personnel.
	Provide for records security.
	Document all actions.

APPENDIX J

Site Safety Plan & Monitoring Program

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ICS Compatible
Site Safety and Health Plan

EMERGENCY SAFETY AND RESPONSE PLAN (FORM SSP-A)

Purpose: The Emergency Safety and Response Plan provides the Safety Officer and ICS personnel a plan for safeguarding personnel during the initial emergency phase of the response. *It is only used during the emergency phase of the response, which is defined as a situation involving an uncontrolled release.* It is also intended to meet the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer or his/her designated staff starts the Emergency Site Safety and Response Plan. They initially address the hazards common to all operations involved in the response (initial site characterization). Outside support organizations must be contacted to ensure the plan is consistent with other plans (local, state, other federal plans). Form SSP-G need not be completed if this form is used. When the operation proceeds into the post-emergency phase (site stabilized and cleanup operations begun) forms SSP-B and SSP-G should be used. For large incidents, the Emergency Site Safety and Response Plan complements the Incident Action Plan. For smaller incidents, the Emergency Site Safety and Response Plan complements ICS Form 201.

Distribution: The Emergency Safety and Response Plan completed by the Safety Officer is forwarded to the Planning Section Chief. Copies are made and attached to the Assignment List(s) (ICS Form 204). The Operations Section Chief, Directors, Supervisors or Leaders get a copy of the plan. They must ensure it is available on site for all personnel to review. The Safety Officer is responsible for ensuring that the Emergency Site Safety and Response Plan properly addresses the hazards of the operation. The Safety Officer accomplishes this through on site enforcement and feedback to the operational units.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Attachments	Enter attachments. Material Safety Data Sheets are mandatory under 1910.120. Safe Work Practices may also be attached.
5	Organization	List the personnel responsible for these positions. IC and Safety Officer are mandatory.
6	Physical Hazards & Protection	Check off the physical hazards at the site. Identify the major tasks involved in the response (skimming, lightering, overpacking, etc.). Check off the controls that would be used to safeguard workers from the physical hazards for each major task.
7	Chemicals	List the chemicals involved in the response. Chemicals may be listed numerically. Check off the hazards, potential health effects, pathway of dispersion, and exposure route of the chemical. Numbers corresponding to the chemical may be entered into the check blocks to differentiate. Check off the PPE to be used. Identify the type of PPE selected (for example: gloves: butyl rubber).
8	Instruments	Indicate the instruments being used for monitoring. List the action levels adjacent to the instruments being used. Identify the chemicals being monitored (2). List the physical parameters of the chemicals. Use a separate form for additional chemicals monitored.

Instructions (continued):

Item #	Item Title	Instructions
9	Decontamination	Check off the decontamination steps to be used. Numbers may be entered to indicate the preferred sequence. Identify any intervening steps necessary on the form or in a separate attachment.
10	Site Map	Draw a rough site map. Ensure all the information listed is identified on the map.
11	Potential Emergencies	Identify any potential emergencies that may occur. If none, so state. Check off the appropriate alarms that may be used. Identify emergency prevention and evacuation procedures in the space provided or on a separate attached sheet.
12	Communications	Indicate type of site communications (phone, radio). Indicate phone numbers or frequencies for the command, tactical and entry functions.
13	Site Security	Identify the personnel assigned. Identify security procedures in the space provided or on a separate attached sheet. Identify the equipment needed to support security operations.
14	Emergency Medical	Identify the personnel assigned. Identify emergency medical procedures in the space provided or on a separate attached sheet. Identify the equipment needed to support security operations.
15	Prepared by:	Enter the name and position of the person completing the worksheet.
16	Date/time briefed:	Enter the date/time the document was briefed to the appropriate workers and by whom.

SITE SAFETY PLAN (FORM SSP-B)

Purpose: The Site Safety Plan provides the Safety Officer and ICS personnel a plan for safeguarding personnel during the post-emergency phase of an incident. The post-emergency phase is when the situation is stabilized and cleanup operations have begun. SSP-B is intended to meet the requirements of the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer or his/her designated staff starts the Site Safety Plan. They initially address the hazards common to all operations involved in the response (initial site characterization). The plan is then reproduced and as a minimum sent to ICS Group/Division Supervisors. They amend it according to unique job or on-scene hazards with support from the Safety Officer and/or his/her staff (detailed site characterization). The plan is continuously updated to address changing conditions. During the first hours of the response, where most response functions are in the emergency phase, the Safety Officer may chose to use the Emergency Safety and Response Plan (SSP-A) in place of the Site Safety Plan. For large incidents, SSP-B compliments the Incident Action Plan (IAP). For smaller incidents, SSP-B compliments ICS Form 201. The Safety Officer is encouraged to use the HAZWOPER Compliance Checklist (Form SSP-K) to ensure the IAP and the 201 address the requirements and all other pertinent ICS forms (203, 205, 206, etc.) are completed.

Distribution: The initial Site Safety Plan completed by the Safety Officer is forwarded to the Planning Section Chief. Copies are made and attached to the Assignment List(s) (ICS Form 204). The Operations Section Chief, Directors, Supervisors or Leaders get a copy and make on site amendments specific to their operation. They must also ensure it is available on site for all personnel to review. The Safety Officer provides personnel from his/her staff to assist in the detailed site characterization. The Safety Officer is responsible for ensuring that the Site Safety Plan for each assignment properly addresses the hazards of the assignment. The Safety Officer must ensure that the safety plans on site are consistent. The Safety Officer accomplishes this through on site enforcement and feedback to the operational units.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Group/Division Supv Strike Team/TF Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Site Accessibility	Check the block(s) if the site is accessible by land, water, air, etc.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Attachments	Enter attachments. Material Safety Data Sheets are mandatory under 1910.120. Safe Work Practices may also be attached.
10	Job/Task Activity	Enter Job/Task & Activities, list hazards, list potential injury and health effects, check exposure routes and identify controls. If more detail is needed for controls, provided attachments.
11	Prepared by	Enter the name and position of the person completing the worksheet.
12	Briefed on by	Enter the date/time the document was briefed to the appropriate workers and by whom.

SITE MAP FOR SITE SAFETY PLAN (SSP-C)

Purpose: The Site Map for the Site Safety Plan is required by Title 29 Code of Federal Regulations Part 1910.120. It provides in 1 place a visual description of the site which can help ICS personnel locate hazards, identify evacuation routes and places of refuge.

Preparation: The Site Map for the Site Safety Plan can be completed by the Safety Officer, his/her staff or by ICS field personnel (Group Supervisors, Task Force/Strike Team Leaders) working at a site with unique and specific hazards. One or several maps may be developed, depending on the size of the incident and the uniqueness of the hazards. The key is to ensure that the workers using the map(s) can clearly identify the work zones, locations of hazards, evacuation routes and places of refuge.

Distribution: This form must be located with the Site Safety Plan (SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Site Accessibility	Check the block(s) if the site is accessible by land, water, air, etc.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Include	Ensure the map includes the listed items provided in this block.
10	Prepared by	Enter the name and position of the person completing the worksheet.
11	Briefed on by	Enter the date/time the document was briefed to the appropriate workers and by whom.

EMERGENCY RESPONSE PLAN (ICS FORM 208D)

Purpose: The Emergency Response Plan provides information on measures to be taken in the event of an emergency. It is used in conjunction with the Site Safety Plan (Form SSP-B). It is also required by Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Safety Officer, his/her staff member or the Site Supervisor/Leader prepares the Emergency Response Plan. A copy of the Medical Plan (ICS Form 206) must always be attached to this form.

Distribution: This form must be located with Site Safety Plan (SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Attachments	Enter attachments. ICS Form 206 must be included.
9	Emergency Alarm	Enter a description of the sound of the emergency alarm and it's location.
10	Backup Alarm	Enter a description of the sound of the emergency alarm and it's location.
11	Emergency Hand Signals	Enter the emergency hand signals to be used.
12	Emergency Personal Protective Equipment Required	Enter the emergency personal protective equipment that may be needed in the event of an emergency.
13	Emergency Notification Procedures	Enter the procedures for notifying the appropriate personnel and organizations in the event of an emergency.
14	Places of Refuge	Enter by name the place of refuge personnel can go to in the event of an emergency.
15	Emergency Decon & Evacuation Steps	Enter emergency decontamination steps and evacuation procedures.
16	Site Security Measures	Enter site security measures needed for emergencies.
17	Prepared by	Enter the name and position of the person completing the worksheet.
18	Briefed on _____ by	Enter the date/time the document was briefed to the appropriate workers and by whom.

DAILY AIR MONITORING LOG (FORM SSP-E)

Purpose: The Daily Air Monitoring Log provides documentation of air monitoring conducted during a spill. The log is a supplement to the Site Safety Plan (SSP-B). It is only required when performing air monitoring operations. The information used from the log can help update the Site Safety Plan.

Preparation: Persons conducting monitoring complete the Daily Air Monitoring Log. Normally these are air monitoring units under the Site Safety Officer. If there is a decision not to monitor during a spill, the reasons must be stated clearly in the Site Safety Plan (SSP-B).

Distribution: The Daily Air Monitoring Log when completed is copied and forwarded to the Site Safety Officer who must review and sign the form. The original form must be available on site, readily available and briefed to all impacted ICS personnel.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Location & size of site	Enter the geographical location of the site and the approximate square area.
6	Hazards of Concern	Enter the hazards being monitored.
7	Action Levels	Enter the action levels/readings for the monitoring teams.
8	Weather	Enter weather information. Ensure units of measure are listed.
9	Air Monitoring Data	Enter the instrument type and number, persons monitoring, results with appropriate units, location of reading, time of reading and interferences and comments.
10	Safety Officer Review	The Safety Officer must review and sign the form.

PERSONAL PROTECTIVE EQUIPMENT (SSP-F)

Purpose: The Personal Protective Equipment form is a list of personal protective equipment to be used in operations. The listing of personal protective equipment is required by Title 29 Code of Federal Regulations Part 1910.120.

Preparation: The Personal Protective Equipment form is completed by the Site Safety Officer, or his/her staff. Personal protective equipment common to all ICS Operations personnel is addressed first. Jobs with unique personal protective equipment requirements (fall protection) are addressed next. When the form is delivered on site, the ICS Director, Supervisor, or Leader may amend the list to ensure personnel are adequately protected from job hazards. It must be completed prior to the onset of any operations, unless addressed elsewhere by Standard Operating Procedures.

Distribution: This form must be located with Site Safety Plan (SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	Hazard(s) Addressed:	Enter the hazards that need to be safeguarded.
8	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
9	Equipment	List the equipment needed to address the hazards. If pre-designed Safe Work Practices are used, indicate here and attach to form.
10	References consulted	List the references used in making the selection for PPE.
11	Inspection Procedures	Enter the procedures for inspecting the Personal Protective Equipment prior to donning. If pre-designed Safe Work Practices are used, indicate here and attach to form.
12	Donning Procedures	Enter the procedures for putting on the PPE. If pre-designed Safe Work Practices are used, indicate here and attach to form.
13	Doffing Procedures	Enter the information for removing the PPE. If pre-designed Safe Work Practices are used, indicate here and attach to form.
14	Limitations and Precautions	List the limitations and precautions when using PPE. Include the maximum time to be inside the PPE. Heat Stress concerns, psychomotor skill detraction and other factors.
15	Prepared by	Enter the name and position of the person completing the worksheet.
16	Briefed on _____ by	Enter the date/time the document was briefed to the appropriate workers and by whom.

DECONTAMINATION (SSP-G)

Purpose: The Decontamination form provides information on how workers can avoid contamination and how to get decontaminated. It is a supplemental form to the Site Safety Plan.

Preparation: The Decontamination Form can be completed by the Site Safety Officer, a member of his/her staff or by the Group/Division Supervisor, Task Force/Strike Team Leader on the site

Distribution: This form must be located with Site Safety Plan (SSP-B). It therefore follows the same distribution route.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Hazard(s) Addressed:	Enter the hazards that need to be safeguarded.
9	Equipment	Enter the decontamination equipment needed for the site. If pre-designed Safe Work Practices are used, indicate here and attach to this form.
10	References consulted	List the references used in making the selection for PPE.
11	Contamination Avoidance Practices	Enter procedures for personnel to avoid contamination. If pre-designed Safe Work Practices are used, indicate here and attach to form.
12	Decon Diagram	Draw a diagram for the decontamination operation. If pre-designed Safe Work Practices are used, indicate here and attach to form.
13	Decon Steps	List the decontamination steps.
14	Prepared by	Enter the name and position of the person completing the worksheet.
15	Briefed on _____ by	Enter the date/time the document was briefed to the appropriate workers and by whom.

SITE SAFETY ENFORCEMENT LOG (SSP-H)

Purpose: The Site Safety Plan Enforcement Log is used to help enforce safety during an incident.

Preparation: The Safety Officer and/or his/her staff complete the Site Safety Plan Enforcement Log. The log is completed as Safety personnel are on scene reviewing the site. It should be completed at a minimum once per day. The number of enforcement logs to be completed depends on the size of the incident. Enough should be completed to ensure that site safety is being adequately enforced.

Distribution: The Site Safety Plan enforcement log when completed is delivered to the Safety Officer. The Safety Officer can use the form to amend the Site Safety Plan (SSP-A or B).

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
7	Attachments	List any attached supporting documentation.
8	Job/Task Activity	Enter only those Job Task/activities for which a deficiency is noted.
	Hazards	Enter the hazard not being sufficiently addressed.
	Deficiency	Enter the deficiency.
	Action Taken	Enter the corrective action taken to address the deficiency.
	Safety Plan Amended?	Enter whether the on site safety plan was amended.
	Signature of Supervisor/Leader	Ensure the Supervisor/Leader signs the form to acknowledge the deficiency.
9	Prepared by	Enter the name and position of the person completing the worksheet.
10	Briefed on by	Enter the date/time the document was briefed to the appropriate workers and by whom.

WORKER ACKNOWLEDGEMENT FORM (SSP-I)

Purpose: The Worker Acknowledgement form is used to document workers who have received safety briefings.

Preparation: Those personnel responsible for conducting safety briefings complete this form initially. Once the briefings are completed, workers who were briefed print their name, sign, date and indicate the time of the briefing.

Distribution: This form is returned to the Safety Officer or designated representative at the end of each operational period.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Site Location	Indicate the location where the briefings are held.
3	Attachments	Indicate any attachments used as part of the briefings.
4	Type of briefing	Check the block next to the type of briefing.
5	Presented by	Enter the name of the person conducting the briefing.
6	Date	Enter the date of the briefing.
7	Time	Enter the time of the briefing.
8	Worker Name	Workers receiving the briefing print their name, sign, date and enter the time they acknowledge the briefing.

EMERGENCY SAFETY & RESPONSE PLAN COMPLIANCE CHECKLIST (SSP-J)

Purpose: The Emergency Safety and Response Plan 1910.120 Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response. It also identifies how form SSP-J can be used to satisfy the HAZWOPER requirements. This checklist is an optional form.

Preparation: The Emergency Safety and Response Plan 1910.120 Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (SSP-H). Many of the requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The Safety Officer should maintain The Emergency Safety and Response Plan (ERP) 1910.120 Compliance Checklist.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
5	Location of Site	Enter the site location.
	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
	ICS Form	Lists those requirements covered by SSP-A.
	Check Block	Enter the check if the site satisfies the requirement.
	Comments	This provides additional information on the requirement. The user may also enter comments.
6	Prepared by	Enter the name and position of the person completing the worksheet.

HAZWOPER 1910.120 COMPLIANCE CHECKLIST (SSP-K)

Purpose: The HAZWOPER 1910.120 Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response. It also identifies how other ICS forms can be used to satisfy the HAZWOPER requirements. This is an optional form.

Preparation: The HAZWOPER 1910.120 Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (SSP-H). The Site Safety Plan Forms (A-G) best meet some of the requirements. The Incident Action Plan is suited to address other requirements, and the Safety Officer should ensure the IAP addresses them. Other requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The HAZWOPER 1910.120 Compliance Checklist should be maintained by the Safety Officer.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
5	Location of Site	Enter the site location.
	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
	ICS Form	Lists those ICS Forms that cover the requirement. **IAP designations means it should be covered in IAP, it does not guarantee it is covered. The Safety Officer must ensure this.**
	Check Block	Enter the check if the site satisfies the requirement.
	Comments	This provides information on where else the requirement may be met. The user may also enter comments.
6	Prepared by	Enter the name and position of the person completing the worksheet.

HAZWOPER 1910.120 DRUM COMPLIANCE CHECKLIST (SSP-L)

Purpose: The HAZWOPER 1910.120 Drum Compliance Checklist is to ensure that incident response operations are in compliance with Title 29, Code of Federal Regulations Part 1910.120, Hazardous Waste Operations and Emergency Response whenever drums are encountered during an incident. This is an optional form.

Preparation: The HAZWOPER 1910.120 Drum Compliance Checklist is completed by the Safety Officer or his/her staff as frequently as necessary whenever the Safety Officer wants to ensure regulatory compliance. It is best used in conjunction with the Site Safety Plan Enforcement Log (SSP-H). The Site Safety Plan Forms (A-G) best meet some of the requirements. Other requirements are performance based and are best evaluated on scene by the Safety Officer or his/her staff.

Distribution: The HAZWOPER 1910.120 Drum Compliance Checklist should be maintained by the Safety Officer.

Instructions:

Item #	Item Title	Instructions
1	Incident Name	Print the name assigned to the incident.
2	Date/Time Prepared	Enter date (month, day, year) prepared.
3	Operational Period	Enter the time interval for which the assignment applies.
4	Safety Officer	Enter the name of the Safety Officer and means of contact.
5	Supervisor/Leader	The Supervisor/Leader who receives this form will enter their name here.
6	Location & size of site	Enter the geographical location of the site and the approximate square area.
7	For Emergencies Contact	Enter the name and way to contact the individual who handles emergencies.
8	Note	Tanks and vaults should also be treated in the same manner as described in the checklist (1910.120((j)(9)).
9	Cites	These are the regulatory cites within 1910.120. The major headings are highlighted in bold. Informational cites or cites that are duplicative are not included.
	Requirement	This lists the requirement in a question format. Some require documentation or some form of action.
	Check Block	Enter the check if the site satisfies the requirement.
	Comments	This provides information on where else the requirement may be met. The user may also enter comments.
10	Prepared by	Enter the name and position of the person completing the worksheet.

SITE SAFETY PLAN ATTACHMENTS (SSP-ATTACH #1 thru #11)

Purpose: The Site Safety Plan attachments provide ready made safe work practices for the Safety Officer and ICS personnel. They are optional documents designed to assist the Safety Officer in communicating and enforcing control of safety hazards. They were derived from the U.S. Coast Guard's National Strike Force's Guide for Developing Oil Spill Site Safety Plans (NSFCCINST M16465.2).

Preparation: The SSP-Attachments require little to no preparation. Some of them have blank sections (due to information changing) that are required to be filled by the Safety Officer or his/her staff. The Safety Officer is encouraged to use the format presented by the attachments for developing his/her own additional safe work practices.

Distribution: These forms must be located with Site Safety Plan (SSP-A). They therefore follow the same distribution route.

Table of Forms

FORM NAME	FORM #	USE	REQUIRED	OPTIONAL	ATTACHED?
Emergency Safety and Response Plan	A	Emergency response phase (uncontrolled)	X		
Site Safety Plan	B	Post-emergency phase (stabilized, cleanup)	X		
Site Map	C	Post-emergency phase map of site and hazards	X		
Emergency Response Plan	D	Part of Form B, to address emergencies	X		
Air Monitoring Log	E	To log air monitoring data	X*		
Personal Protective Equipment	F	To document PPE equipment and procedures	X*		
Decontamination	G	To document decon equipment and procedures	X*		
Site Safety Enforcement Log	H	To use in enforcing safety on site		X	
Worker Acknowledgement Form	I	To document workers receiving briefings		X	
Form A Compliance Checklist	J	To assist in ensuring HAZWOPER compliance		X	
Form B Compliance Checklist	K	To assist in ensuring HAZWOPER compliance		X	
Drum Compliance Checklist	L	To assist in ensuring HAZWOPER compliance		X	
Other:					

* *Required only if function or equipment is used during a response*

EMERGENCY SAFETY and RESPONSE PLAN	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Attachments: **Attach MSDS for each Chemical**
5. Organization IC:	Safety: Group Supv:	Entry Team:	Backup Team:	Decon Team:
6. Physical Hazards and Protection	Confined Space ☐ Noise ☐ Heat Stress ☐ Cold Stress ☐ Electrical ☐ Animal/Plant/Insect ☐ Ergonomic ☐ Ionizing Rad ☐ Slips/Trips/Falls ☐ Struck by ☐ Water ☐ Violence ☐ Excavation ☐ Biomedical waste and/or needles ☐ Fatigue ☐ Other (specify)			

Major Tasks	Entry Permit	Ventilate	Hearing Protection	Shoes (type)	Hard Hats	Clothing (cold wx)	Life Jacket	Work/ Rest (hrs)	Fluids (amt/time)	Signs and Barricade	Fall Protect	Post Guards	Flash Protect	Work Gloves	Other

7. Chemicals	Hazards		Target Organs	Exposure Routes	PPE	Type of PPE
	Explosive ☐ Flammable ☐ Reactive ☐ Biomedical ☐ Toxic ☐	Radioactive ☐ Carcinogen ☐ Oxidizer ☐ Corrosive ☐ Specify Other:	Eyes ☐ Nose ☐ Skin ☐ Ears ☐ Central Nervous System ☐ Respiratory ☐ Throat ☐ Lungs ☐ Heart ☐ Liver ☐ Kidney ☐ Blood ☐ Lungs ☐ Circulatory ☐ Gastrointestinal ☐ Bone ☐ Other:	Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	Face Shield ☐ Eyes ☐ Gloves ☐ Inner Suit ☐ Splash Suit ☐ Level A Suit ☐ SCBA ☐ APR ☐ SAR ☐ Cartridges ☐ Fire Resistance ☐	

8. Instruments	Action Levels	Chemical Name:	LEL/UEL %	Odor Thresh Ppm	Ceiling/ IDLH	STEL/TLV	Flash Point/ Ignition Pt (F or C)	Vapor Pressure (mm)	Vapor Density	Specific Gravity	Boiling Point F or C
O2 ☐ CGI ☐ Radiation ☐ Total HCs ☐ Colorimetric ☐ Thermal ☐ Other ☐											

Form SSP-A: Page of

10. Site Map. Include: Work Zones, Locations of Hazards, Security Perimeter. Places of Refuge, Decontamination Line, Evacuation Routes, Assembly Point, Direction of North

11. Decontamination:				
Instrument Drop Off ☐	Suit Wash ☐	Bottle Exchange ☐	SCBA/Mask Rinse ☐	Intervening Steps ☐ Specify:
Outer Boots/Glove Removal ☐	Decon Agent: Water ☐	Outer Suit Removal ☐	Inner Glove Removal ☐	
Suit/Gloves/Boot Disposal ☐	Other ☐	Inner Suit Removal ☐	Work Clothes Removal ☐	
	Specify:	SCBA/Mask Removal ☐	Body Shower ☐	

12. Potential Emergencies	Evacuation Alarms:	Emergency Prevention and Evacuation Procedures:
Fire ☐	Horn ☐ # Blasts ☐	Safe Distance
Explosion ☐	Bells ☐ #Rings ☐	
Other ☐	Radio Code ☐	
	Other:	

13. Communications: Radio? ☐ Phone? ☐	Command #:	Tactical #:	Entry #:
14. Site Security Personnel Assigned	Procedures:		Equipment
15. Emergency Medical Personnel Assigned	Procedures:		Equipment
16. Prepared By:	17. Date/Time Briefed:		**Form SSP-A:** Page of

CG ICS SITE SAFETY PLAN (SSP) HAZARD ID/EVAL/CONTROL	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact
5. Supervisor/Leader	6. Location and Size of Site	7. Site Accessibility Land☐ Water☐ Air ☐ Comments:	8. For Emergencies Contact:	9. Attachments: **Attach MSDS for each Chemical**
10. Job Task/Activity	Hazards* ⟹	Potential Injury and Health Effects	Exposure Routes	Controls: Engineering, Administrative, PPE
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
			Inhalation ☐ Absorption ☐ Ingestion ☐ Injection ☐ Membrane ☐ ☐	
11. Prepared By:	12. Date/Time Briefed:	***HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, Diving		**Form SSP-B:** Page of

CG ICS SSP: SITE MAP	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. Site Accessibility Land☐ Water☐ Air ☐ Comments:	8. For Emergencies Contact:	9. Include: - Work Zones - Locations of Hazards - Security Perimeter - Places of Refuge - Decontamination Line - Evacuation Routes
10. Sketch of Site:				
11. Prepared By:	12. Date/Time Briefed:	**HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, Diving		**Form SSP-C:** Page of

CG IC .SP: EMERGENCY RESPONSE PLAN	1. Incident Name	2. Date/Time Prep.	3. Operational Period	4. Safety Officer (include method of con.
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Attachments: **INCLUDE ICS FORM 206 and EMT Medical Response Procedures**
9. Emergency Alarm (sound and location)	10. Backup Alarm (sound and location)	11. Emergency Hand Signals	12. Emergency Personal Protective Equipment Required:	

13. Emergency Notification Procedures	14. Places of Refuge (also see site map form 208B)	15. Emergency Decon and Evacuation Steps	16. Site Security Measures

17. Prepared By:	18. Date/Time Briefed:	**HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, Diving	**Form SSP-D:** Page of

CG ICS SSP: AIR MONITORING LOG	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)	
5. Site Location	6. Hazards of Concern	7. Action Levels (include references):		8. Weather: Temperature: Precipitation: Wind: Relative Humidity: Cloud Cover:	
9. Instrument, ID Number Calibrated? Indicate below.	Monitoring Person Name(s)	Results (units)	Location	Time	Interferences and Comments
10. Safety Officer Review:		Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, Eye Burning		**Form SSP-E:** Page of	

CG ICS SSP: PERSONAL PROTECTIVE EQUIPMENT	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. Hazards Addressed:		8. For Emergencies Contact:

9. Equipment:				10. References Consulted:

11. Inspection Procedures:	12. Donning Procedures:	13. Doffing Procedures:	14. Limitations and Precautions (include maximum stay time in PPE):

15. Prepared By:	16. Date/Time Briefed:	Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, Eye Burning	**Form SSP-F:** Page of

CG ICS SSP: DECONTAMINATION	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Hazard(s) Addressed:

9. Equipment:				10. References Consulted:

11. Contamination Avoidance Practices:	12. Decon Diagram	13. Decon Steps

14. Prepared By:	15. Date/Time Briefed:	Potential Health Effects: Bruise/Lacerations, Organ Damage, Central Nervous System Effects, Cancer, Reproductive Damage, Low Back Pain, Temporary Hearing Loss, Dermatitis, Respiratory Effects, Bone Breaks, Eye Burning	**Form SSP-G:** Page of

CG ICS SSP: ENFORCEMENT LOG	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)	
5. Supervisor/Leader	6. For Emergencies Contact:			7. Attachments:	
8. Job Task/Activity	Hazards	Deficiency	Action Taken	Safety Plan Amended?	Signature of Supervisor/Leader
9. Prepared By:	10. Date/Time Briefed:	**HAZARD LIST**: Physical/Safety, Toxic, Explosion/Fire, Oxygen Deficiency, Ionizing Radiation, Biological, Biomedical, Electrical, Heat Stress, Cold Stress, Ergonomic, Noise, Cancer, Dermatitis, Drowning, Fatigue, Vehicle, Diving		**Form SSP-H:** Page of	

CG ICS SSP WORKER ACKNOWLEDGEMENT FORM	1. Incident Name	2. Site Location:	3. Attachments:	
4. Type of Briefing	5. Presented By:		6. Date	7. Time
Safety Plan/Emergency Response Plan ☐ Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
8. Worker Name (Print)	Signature*		Date	Time
* *By signing this document, I am stating that I have read and fully understand the plan and/or information provided to me.*			**SSP-I:** Page of	

5. Location of Site				
CG ICS Emergency Response Plan 1910.120 COMPLIANCE CHECKLIST	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Site Supervisor/Leader

Cite: 1910.120	Requirement(sections that duplicate or explain are omitted)	ICS Form	[4]	Comments
(q)(1)	Is the plan in writing?	SSP-A	☐	
(1)	Is the plan available for inspection by employees?	N/A	☐	Performance based
(q)(2)(i)	Does the plan address pre-emergency planning and coordination?	SSP-A	☐	
(ii)	Does it address personnel roles?	SSP-A	☐	
(ii)	Does it address lines of authority?	SSP-A	☐	
(ii)	Does it address communications?	SSP-A	☐	
(iii)	Does it address emergency recognition?	SSP-A	☐	
(iii)	Does it address emergency prevention?	SSP-A	☐	
(iv)	Does it identify safe distances?	SSP-A	☐	
(iv)	Does it address places of refuge?	SSP-A	☐	
(v)	Does it address site security and control?	SSP-A	☐	
(vi)	Does it identify evacuation routes?	SSP-A	☐	
(vi)	Does it identify evacuation procedures?	SSP-A	☐	
(vii)	Does it address decontamination?	SSP-A	☐	
(viii)	Does it address medical treatment and first aid?	SSP-A	☐	
(ix)	Does it address emergency alerting procedures?	SSP-A	☐	
(ix)	Does it address emergency response procedures	SSP-A	☐	
(x)	Was the response critiqued?	N/A	☐	Performance based
(xi)	Does it identify Personal Protection Equipment?	SSP-A	☐	
(xi)	Does it identify emergency equipment?	SSP-A	☐	
(q)(3)(ii)	All the hazardous substances identified to the extent possible?	N/A	☐	Performance based
(ii)	All the hazardous conditions identified to the extent possible?	N/A	☐	Performance based
(ii)	Was site analysis addressed?	N/A	☐	Performance based
(ii)	Were engineering controls addressed?	N/A	☐	Performance based
(ii)	Were exposure limits addressed?	N/A	☐	Performance based
(ii)	Were hazardous substance handling procedures addressed?	N/A	☐	Performance based
(iii)	Is the PPE appropriate for the hazards identified?	N/A	☐	Performance based
(iv)	Is respiratory protection worn when inhalation hazards present?	N/A	☐	Performance based
(v)	Is the buddy system used in the hazard zone?	N/A	☐	Performance based
(vi)	Are backup personnel on standby?	N/A	☐	Performance based
(vi)	Are advanced first aid support personnel standing by?	N/A	☐	Performance based
(vii)	Has the ICS designated safety official been identified?	SSP-A	☐	
(vii)	Has the Safety Official evaluated the hazards?	N/A	☐	Performance based
(viii)	Can the Safety Official communicate with IC immediately?	N/A	☐	Performance based
(ix)	Are appropriate decontamination procedures implemented?	N/A	☐	Performance based

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Site Supervisor/Leader	5. Location of Site

Cite: 1910.120	Requirement(sections that duplicate or explain are omitted)	ICS Form	[4]	Comments
(b)(1)(ii)(A)	Organizational structure?	203	☐	
(B)	Comprehensive workplan?	IAP	☐	Incident Action Plan
(C)	Site Safety Plan?	SSP-B	☐	
(D)	Safety and health training program?	N/A	☐	Responsibility of each employer
(E)	Medical surveillance program?	N/A	☐	Responsibility of each employer
(F)	Employer SOPs?	N/A	☐	Responsibility of each employer
(G)	Written program related to site activities?	N/A	☐	
(b)(1)(iii)	Site excavation meets shored or slope requirements in 1926?	N/A	☐	
(b)(2)(i)(D)	Lines of communication?	201 203 205	☐	
(b)3(iv)	Training addressed?	N/A	☐	Responsibility of each employer
(v)-(vi)	Information and medical monitoring addressed?	N/A	☐	Responsibility of each employer
(b)4(i)	Site Safety Plan kept on site?	N/A	☐	
(ii)(A)	Safety and health hazard analysis conducted?	N/A	☐	
(B)	Properly trained employees assigned to right jobs?	N/A	☐	
(C)	Personnel Protective Equipment issues addressed?	SSP-F	☐	
(E)	Frequency and types of air monitoring addressed?	SSP-E	☐	
(F)	Site control measures in place?	SSP-B	☐	
(G)	Decontamination procedures in place?	SSP-G	☐	
(H)	Emergency Response Plan in place?	SSP-D	☐	
(I)	Confined space entry procedures?	SSP-B	☐	
(J)	Spill containment program	SSP-B	☐	
(iii)	Pre-entry briefings conducted?	SSP-I	☐	
(iv)	Site Safety Plan effectiveness evaluated?	SSP-H	☐	
(c)(1)	Site characterization done?	N/A	☐	
(c)(2)	Preliminary evaluation done by qualified person?	N/A	☐	
(c)(3)	Hazard identification performed?	SSP-B	☐	
(c)(4)(i)	Location and size of site identified?	SSP-B	☐	
(ii)	Response activities, job tasks identified?	SSP-B	☐	
(iii)	Duration of tasks identified?	SSP-B	☐	Operational period
(iv)	Site topography and accessibility addressed?	SSP-C	☐	
(v)	Health and safety hazards addressed?	SSP-B	☐	
(vi)	Dispersion pathways addressed?	SSP-B	☐	
(vii)	Status and capabilities of medical emergency response teams?	206	☐	
(c)(5)(i)(iv)	Chemical protective clothing addressed and properly selected?	SSP-F	☐	
(ii)	Respiratory protection addressed?	SSP-B and F	☐	
(iii)	Level B used for unknowns?	N/A	☐	
(c)(6)(i)	Monitoring for ionization conducted?	SSP-E	☐	
(ii)	Monitoring conducted for IDLH conditions?	SSP-E	☐	
(iii)	Personnel looking out for dangers of IDLH environments?	N/A	☐	
(iv)	Ongoing air monitoring program in place?	SSP-E	☐	

Form SSP-K: Page 1 of 3

CG [illegible]SP: 1910.120 COMPLIANCE CHECKLIST	1. Incident Name	2. Date/Time Pre[illegible]	3. Operational Period		
Cite: 1910.120	Requirement		ICS Form	[4]	Comments
(e)(7)	Employees informed of potential hazard occurrence?		SSP-B	☐	
(e)(8)	Properties of each chemical made aware to employees?		SSP-B	☐	
(d)(1)	Appropriate site control procedures in place?		IAP, SSP-B	☐	
(d)(2)	Site control program developed during planning stages?		IAP, SSP-B	☐	
(d)(3)	Site map, work zones, alarms, communications addressed?		IAP, SSP-B	☐	
(g)(1)(i)	Engineering, admin controls considered?		SSP-B	☐	
(iii)	Personnel not rotated to reduce exposures?		N/A	☐	
(g)(5)(i)	PPE selection criteria part of employer's program?		N/A	☐	Responsibility of employer
(ii)	PPE use and limitations identified?		SSP-F	☐	
(iii)	Work mission duration identified?		SSP-F	☐	
(iv)	PPE properly maintained and stored?		N/A	☐	Responsibility of employer
(vi)	Are employees properly trained and fitted with PPE?		N/A	☐	Responsibility of employer
(vii)	Are donning and doffing procedures identified?		SSP-F	☐	
(viii)	Are inspection procedures properly identified?		SSP-F	☐	
(ix)	Is a PPE evaluation program in place?		SSP-F	☐	
(h) (3)	Periodic monitoring conducted?		SSP-E	☐	
(k)(2)(i)	Have decontamination procedures been established?		SSP-G	☐	
(ii)	Are procedures in place for contamination avoidance?		SSP-G	☐	
(iii)	Is personal clothing properly deconned prior to leaving the site?		SSP-G	☐	
(iv)	Are decontamination deficiencies identified and corrected?		SSP-H	☐	
(k)(3)	Are decontamination lines in the proper location?		SSP-C	☐	
(k)(4)	Are solutions/equipment used in decon properly disposed of?		N/A	☐	
(k)(6)	Is protective clothing and equipment properly secured?		N/A	☐	
(k)(7)	If cleaning facilities are used, are they aware of the hazards?		N/A	☐	
(k)(8)	Have showers and change rooms provided, if necessary?		N/A	☐	
(l)(1)(iii)	Are provisions for reporting emergencies identified?		SSP-D	☐	
(iv)	Are safe distances and places of refuge identified?		SSP-B and C	☐	
(v)	Site security and control addressed in emergencies?		SSP-D	☐	
(vi)	Evacuation routes and procedures identified?		SSP-D	☐	
(vii)	Emergency decontamination procedures developed?		SSP-D	☐	
(ix)	Emergency alerting and response procedures identified?		SSP-D	☐	
(x)	Response teams critiqued and followup performed?		SSP-H	☐	
(xi)	Emergency PPE and equipment available?		SSP-D	☐	
(l)(3)(i)	Emergency notification procedures identified?		SSP-D	☐	
(ii)	Emergency response plan separate from Site Safety Plan?		SSP-D	☐	
(iii)	Emergency response plan compatible with other plans?		SSP-D	☐	
(iv)	Emergency response plan rehearsed regularly?		SSP-D	☐	
(v)	Emergency response plan maintained and kept current?		SSP-H	☐	
1910.165(b)(2)	Can alarms be seen/heard above ambient light and noise levels?		N/A	☐	
(b)(3)	Are alarms distinct and recognizable?		N/A	☐	

Form SSP-K: Page 2 of 3

CG ICS SSP: 1910.120 COMPLIANCE CHECKLIST	1. Incident Name	2. Date/Time Prepared	3. Operational Period		
Cite: 1910.165	Requirement		ICS Form	[4]	Comments
(b)(4)	Are employees aware of the alarms and are they accessible?		SSP-D	☐	
(b)(5)	Are emergency phone numbers, radio frequencies clearly posted?		206	☐	
(b)(6)	Signaling devices in place where there are 10 or more workers?		IAP	☐	
(c)(1)	Are alarms like steam whistles, air horns being used?		IAP	☐	
(d)(3)	Are backup alarms available?		IAP	☐	
1910.120(m)	Are areas adequately illuminated?		IAP	☐	
(n)(1)(i)	Is an adequate supply of potable water available?		IAP	☐	
(ii)	Are drinking water containers equipped with a tap?		IAP	☐	
(iii)	Are drinking water containers clearly marked?		IAP	☐	
(iv)	Is a drinking cup receptacle available and clearly marked?		IAP	☐	
(n)(2)(i)	Are non-potable water containers clearly marked?		IAP	☐	
(n)(3)(i)	Are their sufficient toilets available?		IAP	☐	
(n)(4)	Have food handling issues been addressed?		IAP	☐	
(n)(6)	Have adequate wash facilities been provided outside hazard zone?		IAP	☐	
(n)(7)	If response is greater than 6 months, have showers been provided?		IAP	☐	
4. Prepared By:					**Form SSP-K: Page 3 of 3**

CG ICS SSP: 1910.120 DRUM COMPLIANCE CHECKSHEET	1. Incident Name	2. Date/Time Prepared	3. Operational Period	4. Safety Officer (include method of contact)
5. Supervisor/Leader	6. Location and Size of Site	7. For Emergencies Contact:		8. Note: tanks and vaults should also be treated in the same manner as described below [1910.120(j)(9)]. Many can also pose confined space hazards.

9. Cite: 1910.120 (Cites that duplicate or explain requirements are omitted)	Requirement	[4]	Comments
(j)(1)(ii)	Drums meet DOT, OSHA, EPA regs for waste they contain, including shipment?	☐	
(iii)	Drums inspected and integrity ensured prior to movement?	☐	
(iii)	Or drums moved to an accessible location (staging area) prior to movement?	☐	
(iv)	Unlabelled drums treated as unknown until properly identified and labeled?	☐	
(v)	Site activities organized to minimize drum handling?	☐	
(vi)	Employers properly warned about the hazards of moving and handling drums?	☐	
(vii)	Suitable overpack drums are available for addressing leaking and ruptured drums?	☐	
(viii)	Leaking materials from drums properly contained?	☐	
(ix)	Are drums that cannot be moved, emptied of contents with transfer equipment?	☐	
(x)	Are suspect buried drums surveyed with underground detection system?	☐	
(xi)	Are soil and covering material above buried drums removed with caution?	☐	
(xii)	Is the proper extinguishing equipment on scene to control incipient fires?	☐	
(j)(2)(i)	Are airlines on supplied air systems protected from leaking drums?	☐	
(ii)	Are employees at a safe distance, using remote equipment, when handling explosive drums?	☐	
(iii)	Are explosive shields in plane to protect workers opening explosive drums?	☐	
(iv)	Is response equipment positioned behind shields when shields are used?	☐	
(v)	Are non-sparking tools used in flammable or potentially flammable atmospheres?	☐	
(vi)	Are drums under extreme pressure opened slowly & workers protected by shields/distance?	☐	
(vii)	Are workers prohibited from standing and working on drums?	☐	
(j)(3)	Is the drum handling equipment positioned and operated to minimize sources of ignition?	☐	
(j)(5)(i)	For shock sensitive drums, have all non-essential employees been evacuated?	☐	
(ii)	For shock sensitive drums: is handling equipment provided with shields to protect workers?	☐	
(iii)	Are alarms that announce start/finish of explosive drum handling actions in place?	☐	
(iv)	Are continuous communications in place between the drum handling site & command post?	☐	
(v)	Are drums under pressure properly controlled for prior to handling?	☐	
(vi)	Are drums containing packaged laboratory wastes treated as shock sensitive?	☐	
(j)(6)(i)	Are lab packs opened by trained and experienced personnel?	☐	
(ii)	Are lab packs showing crystallization treated as shock sensitive?	☐	
(j)(8)(ii-iii)	Are drum staging areas manageable with marked access and egress?	☐	
(iv)	Is bulking of drums conducted only after drum contents have been properly identified?	☐	

10. Prepared By:	**Form SSP-L:**

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Products containing Benzene Additional Attachments:		2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:	
Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Exposure Route	Controls: Engineering, Administrative, PPE	Medical Response
Cancer			Bone marrow depression, Abnormal blood counts, Cancer of the blood (leukemia), incapacitating illness & death	Inhalation **X** Absorption **X** Ingestion Injection Membrane	- Avoid Contact - Avoid confined & tight spaces - Keep upwind - Air monitoring - Chem resistance clothing - Respirators > PEL	- Test blood & urine for phenol
Dermatitis			Reddening of the skin, benzene is a suspected skin carcinogen	Inhalation Absorption **X** Ingestion Injection Membrane	- Avoid Contact - Keep upwind - Wear chemical resistance gloves & clothing - Wash frequently	- Wash skin & exposed areas with soap and water
Eye Irritation			Red eye, weeping eye, blurry vision	Inhalation Absorption **X** Ingestion Injection Membrane	- Avoid Contact - Keep upwind - Wear safety glasses - High splash zone, wear chemical resistance goggles	- Flush eyes with water
Central Nervous System Effect			Giddiness, headache, nausea, staggered gait, fatigue -	Inhalation **X** Absorption **X** Ingestion Injection Membrane	- Avoid contact, & confined/tight spaces - Keep upwind - Air monitoring - Chem resistance clothing Respirators > PEL	- Test blood & urine for phenol
Respiratory Irritant			Irritation of nose, throat and lungs	Inhalation **X** Absorption **X** Ingestion Injection Membrane	- Avoid confined & tight spaces - Keep upwind - Air monitoring - Chem resistance clothing Respirators > PEL	- Test blood & urine for phenol
4. Prepared by:	5. Date/time briefed:		**Last Update: 4/23/07**		**SSP-Attach 1: Benzene** **Page _____ of _____**	

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Products Containing Hydrogen Sulfide Additional Attachments:		2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:	
Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Exposure Route	Controls: Engineering, Administrative, PPE	Medical Response
Chemical asphyxiation	**Note: Poor Warning Properties**		Headache, dizziness, fatigue, staggered gait, giddiness	Inhalation **X** Absorption Ingestion Injection Membrane _____	- Avoid Contact - Avoid confined & tight spaces - Keep upwind - Air monitoring - SCBA > PEL	
Diarrhea			Runny or loose stool	Inhalation **X** Absorption Ingestion **X** Injection Membrane _____	- Avoid Contact - Keep upwind - Wash frequently - Avoid confined & tight spaces - Keep upwind - Air monitoring - SCBA > PEL	- If ingested, induce vomiting, drink large volumes of water
Respiratory Paralysis			Difficulty breathing, fatigue, strong signs of weakness	Inhalation **X** Absorption Ingestion Injection Membrane _____	- Avoid Contact - Keep upwind - Wash frequently - Avoid confined & tight spaces - Keep upwind - Air monitoring - SCBA > PEL	- Provide support respiration where needed
Chemical Burns			Severe burning of skin, eyes and other external organs -	Inhalation Absorption Ingestion Injection Membrane Contact **X**	- Avoid areas above 10% LEL - Keep upwind - Air monitoring - Flash protective clothing SCBAs > PEL	-Treat for burns as appropriate
Central Nervous System Depression			Headache, dizziness, fatigue, staggered gait, giddiness	Inhalation **X** Absorption Ingestion Injection Membrane _____	- Avoid confined & tight spaces - Keep upwind - Air monitoring - Chem resistance clothing SCBA > PEL	- Remove from site
4. Prepared by:	5. Date/time briefed:		**Last Update: 4/23/07**		**SSP-Attach 2: Hydrogen Sulfide Page _____ of _____**	

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Generic Signs & Symptoms of Toxic Exposure Attachments:	2. Divisions/Groups/Units affected:	3. Job Tasks Involving Hazard:

Signs and Symptoms	Action to be Taken
- Sudden weight loss or change in appetite. - Unusual fatigue or sleeping difficulties - Unusual irritability - Skin rashes/allergies/sores - Hearing loss - Vision loss or problems - Changes in sense of smell - Shortness of breath, asthma, cough, wheeze, excess sputum - Chest pains - Nausea, vomiting, dizziness - Weakness, tremors - Headaches - Stomach pains - Personality changes	**1. REMOVE PERSON AND OTHERS FROM SITE.** **2. REPORT SYMPTOM TO SUPERVISOR** **3. EVALUATE POTENTIAL SOURCES** **4. REQUEST SITE CHARACTERIZATION BY SITE SAFETY OFFICER**

4. Prepared by:	5. Date/time briefed:	**Last Update: 4/23/07**	**SSP-Attach 3: Signs/Symptoms of Toxic Exposure** **Page ____ of ____**

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Heat Stress Attachments:		2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:	
Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Exposure Route	Controls: Engineering, Administrative, PPE	Medical Response
Heat Stroke	Minimize exposure	NIOSH: Working in Hot Environments	Skin is hot Skin is dry Skin is red and spotted Body Temp: 105 or > Mental confusion Convulsions Unconscious	Inhalation Absorption **X** Ingestion Injection Membrane	- Acclimitize workers - Avoid direct sun - Institute work/rest regimens - Provide cool rest areas - Drink 5-7 ounces water every 15-20 minutes - Consider cooling garments - Use heat stress monitors - Use canopies or other shelter - Minimize workers with illnesses and excessive weight	- Get EMT assistance immediately - Remove victim to cool area - Soak clothing w/water - Fan body to increase cooling
Heat Exhaustion	Minimize exposure	NIOSH: Working in Hot Environments	Extreme weakness Giddiness, headache Nausea, Vomiting Skin is clammy & moist Complexion is pale/flushed Body Temp: normal to slightly elevated	Inhalation Absorption **X** Ingestion Injection Membrane		- Notify EMT - Rest victim in cool place - Have victim drink plenty of water
Heat Cramps	Minimize exposure	NIOSH: Working in Hot Environments	Painful spasms of muscles Profuse sweating	Inhalation Absorption **X** Ingestion Injection Membrane		- Remove victim from site - Ensure victim drinks plenty of water and replaces electrolytes
Fainting	Minimize exposure	NIOSH: Working in Hot Environments	Victim faints due to lack of blood to the brain	Inhalation Absorption **X** Ingestion Injection Membrane		- Remove victim to cool area - Ensure victim drinks plenty of fluid - Ensure victim is not sedentary in direct heat
Heat Rash	Minimize exposure	NIOSH: Working in Hot Environments	Skin rash Experience of prickly heat	Inhalation Absorption **X** Ingestion Injection Membrane		- Remove victim to cool place - Ensure victim drinks plenty of water
4. Prepared by:	5. Date/time briefed:		**Last Update: 4/23/07**		**SSP-Attach 4: Heat Stress** **Page _____ of _____**	

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Cold Stress Attachments:		2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:	
Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Exposure Route	Controls: Engineering, Administrative, PPE	Medical Response
Hypothermia	Minimize exposure	NIOSH: Working in Cold Environments	Pain in extremities Uncontrollable shivering Reduced core temperature Cool skin Rigid muscles Slowed heart rate Weakened pulse Low blood pressure Slow irregular breathing Slurred speech Drowsiness Incoherence Uncoordination Diminished dexterity Diminished judgement	Inhalation Absorption **X** Ingestion Injection Membrane	- Reduce manual work load - Ensure workers drink plenty of water - Establish warm locations for breaks - Establish work & rest regimens - Establish shelters, canopies or other devices to reduce wind effect - Minimize sitting still or standing around - Ensure proper sleep - Ensure proper diet - Ensure right balance of protective clothing - Ensure workers are not overheated by clothing	- Remove victim from wind, snow & rain - Minimize use of energy - Keep person awake - Remove wet clothing - Get into dry clothing - Wrap blanket around - Pack neck, groin, armpits with warm packs or towels - Give sweat warm drinks - Remove person to medical facility
Frostbite	Minimize exposure	NIOSH: Working in Cold Environments	Whitened areas of skin Burning sensation at first Blistering Affected part; cold, numb & tingling	Inhalation Absorption **X** Ingestion Injection Membrane		- Cover frozen part - Provide extra clothing & blankets - Place affected part in warm water or with warm packs - If no pads, wrap in blanket - Discontinue warming when part becomes flushed and swollen - Exercise part after warming, but place no pressure on it - Give sweet warm fluids - Do not rub part with anything - Do not use hot heating devices on part - Obtain medical assistance
4. Prepared by:	5. Date/time briefed:		**Last Update: 4/23/07**		**SSP-Attach 5: Cold Stress**	

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Cold Stress Attachments:		2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:	
Medical Condition	Action Level	Reference	Signs, Symptoms & Potential Health Effects	Exposure Route	Controls: Engineering, Administrative, PPE	Medical Response
Chilblain	Minimize exposure	NIOSH: Working in Cold Environments	Recurring localized ithcing Swelling, painful inflammation of fingers, toes, or ears Severe spasms	Inhalation Absorption **X** Ingestion Injection Membrane	- Reduce manual work load - Ensure workers drink plenty of water - Establish warm locations for breaks - Establish work & rest regimens - Establish shelters, canopies or other devices to reduce wind effect - Minimize sitting still or standing around - Ensure proper sleep - Ensure proper diet - Ensure right balance of protective clothing - Ensure workers are not overheated	- Remove to warmer area - Consult physician
Frostnip	Minimize exposure	NIOSH: Working in Cold Environments	Skin turns white	Inhalation Absorption **X** Ingestion		- Remove to warmer area - Refer to treatment for frost bite
Acrocyanosis	Minimize exposure	NIOSH: Working in Cold Environments	Hands and feet are cold, blue and sweaty	Inhalation Absorption **X** Ingestion		- Remove to warmer area - Loosen tight clothing - Consult physician
Trench Foot	Minimize exposure	NIOSH: Working in Cold Environments	Swelling of the foot Tingling, itching Severe pain Blistering	Inhalation Absorption **X** Ingestion		- Remove to warmer area - Refer to treatment for frost bite - Consult physician
Raynaud's Disease	Minimize exposure	NIOSH: Working in Cold Environments	Fingers turn white & stiff Intermittent blanching & reddening of fingers and toes Affected areas tingle & becomes very red or reddish purple	Inhalation Absorption **X** Ingestion Injection Membrane		- Remove to warmer area - Consult physician
4. Prepared by:	5. Date/time briefed:		**Last Updated: 4/23/07**		**SSP-Attach 5: Cold Stress**	

CG ICS SSP LOG/RECORD OF SAFETY BREIFINGS ATTACHMENT	1. Incident Name	2. Site Location:	3. Site Supervisors:	
4. Type of Briefing	5. Presented by:		6. Date	7. Time
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Start Shift ☐ Pre-Entry ☐ Exit ☐ End of Shift ☐ Specify Other:				
Last Updated: 4/23/07			**SSP-Attach 6: Record of Safety Briefings** **Page _____ of _____**	

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Helicopter Operations Additional Attachments:	2. Helicopter Location	3. Emergency contacts:

Activity	Safe Work Practice	4. Checked [X]
Pre-boarding	- Receive Safety briefing from helicopter operators	☐
	- Receive emergency extrication briefing	☐
	- Know location of emergency equipment	☐
	- Know water landing procedures	☐
	- Loose fitting hats, clothing & other gear removed at minimum 100 ft away	☐
	- Ensure operator knows how to contact emergency services	☐
	- Ensure operator has good communications with coordinating vessels	☐
	-	
Approaching and Exiting Helicopter	- Approach from front	☐
	- Approach only when signaled by pilot	☐
	- Never walk under tail blade	☐
	- Approach in clear view of pilot	☐
	- Approach in crouching position	☐
Onboard Helicopter/Helicopter Startup	- Wear seatbelts	☐
	- Wear hearing protection	☐
	- Ground crew & other persons maintain minimum 50 ft from operating helo	☐
	- Be alert for ground traffic and air traffic to assist pilot	☐
Other	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐

5. Prepared by:	6. Date/time briefed:	**Last Updated: 4/23/07**	**SSP-Attach 7: Helicopter Safety** **Page _____ of _____**

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Small Boat Operations Additional Attachments:	2. Small Boat Unit Assignment	3. Emergency contacts:

Activity	Safe Work Practice	4. Checked [X]
Pre-boarding	- Receive safety briefing from boat crew operators	☐
	- Receive emergency extrication briefing	☐
	- Know location of emergency equipment	☐
	- Ensure operator knows how to contact emergency services	☐
	- Ensure operator has good comms with coordinating vessels & shore units	☐
	- Ensure comms schedule with parent unit is understood	☐
	- Ensure distress signals are available for day & night operations (3 per shift)	☐
	- Ensure qualified operators are running the boats	☐
	- Ensure appropriate number of CG approved Type I & II preservers	☐
	- Confirm location of safe seating from boat operator	☐
	- Ensure portable fuel tanks are full prior to boarding	☐
	- Keep all sources of ignition away from fueling area	☐
	- Ensure boat does not exceed safe load capacity (personnel & equipment)	☐
	- Ensure proper footwear for maintaining adequate boat deck contact	☐
	- Ensure equipment on boat is distributed evenly to ensure stability	☐
	- Ensure at least 2 people are operating the boat	☐
	- Ensure sun protection is available (glasses, and sun screen)	☐
	- Ensure adequate food & water is available for duration of operation	☐
	- Ensure first aid kits, fire extinguishers, alternate means of propulsion	☐
	- Ensure adequate fenders and mooring lines are available	☐
Boat Operations	- Remain seated whenever possible. Keep low in the boat.	☐
	- Ensure boat is able to maintain direct contact visually or by radio	☐
	- Avoid anchoring the boat by the stern	☐
Boat mooring and egress	- Keep hands & feet away from pinch points between boat & dock	☐
	- Stay clear of lines being used for mooring	☐
	- Do not disembark with bulky or heavy equipment, get assistance	☐
	- If not assisting in the mooring operation, remain seated until lines are tied	☐
		☐
		☐

5. Prepared by:	6. Date/time briefed:	**Last Updated: 4/23/07**	**SSP-Attach 8: Small Boat Safety** **Page _____ of _____**

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Vehicle Operations:	2. Vehicle Unit Designator	3. Emergency contacts:

Activity	Safe Work Practice	4. Checked [X]
Before driving	- Ensure tires are inflated	☐
	- Ensure gas cap is in place & tight	☐
	- Ensure front hood and trunk are secured	☐
	- Ensure spare tire is in good condition	☐
	- Locate tire changing equipment	☐
	- Locate emergency road kit	☐
	- Check headlights, brake, emergency, turn signals and parking lights	☐
	- Adjust side mirrors	☐
	- Adjust review mirrors	☐
	- Ensure horn is in working order	☐
	- Ensure seat belts fasten	☐
	- Ensure sunglasses are available	☐
	- Locate operating switches for lights, wipers, temperature control, defroster	☐
	- Ensure adequate directions to destination are available	☐
	- Check to ensure driving route avoids high crime areas	☐
	- Ensure adequate fuel (keep half full during emergencies)	☐
Vehicle Operations	- After ignition, look for warning lights.	☐
	- Test braking system	☐
	- Obey all traffic signs and speeds	☐
	- Do not drive if hearing, sight or appendages are impaired	☐
	- Take frequent breaks; once every 100 miles	☐
	- During breaks, if sleeping, park in lighted lot and keep doors locked	☐
	- Do not drive if tired, on medication or under influence of alcohol	☐
	- Monitor traffic reports for accidents, weather and construction	☐
Other Precautions	-	☐
	-	☐
	-	☐
	-	☐
	-	☐
	-	☐

5. Prepared by:	6. Date/time briefed:	**Last Updated: 4/23/07**	**SSP-Attach 9: Vehicle Safety** **Page _____ of _____**

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Insect Hazards Additional Attachments:	2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:
Hazard Type	Potential Sources	Signs & Symptoms	Control	Medical Treatment
Insect Bites & Stings	Bees	Allergic person: -Swollen throat -Difficult breathing -Noisy breath -Sudden pain -Severe itching, hives, acute redness, swelling -white firm swelling -reduced consciousness, shock	- Recon area prior to work & identify nests & habitats - Identify as hazard areas & place on SSP map - Provide insect repellent - Encourage long sleeves & pants if practical - Conduct tick & bite inspection during breaks and prior to departing site - Identify persons with insect allergies & restrict them where necessary - Obtain emergency insect bite kits	- Wash wound with soap & water - Request med assistance for allergic persons - Remove stinger without pinching or squeezing - Use cold pack to reduce swelling, use pad between skin and pack - Keep wounded area below heart to slow spread of venom - Do not administer aspirin or alcohol
	Black Widow Spider	-Systemic poison -Flu – like symptoms -Severe abdominal pain -Rigidity, muscle pain, cramping, -Chest tightness, breathing difficulty, -Pain in soles of feet -Alternating dry & salivating mouth, -Nausea, vomiting -Profuse sweating or swollen eyelids		- Wash wound with soap & water - Request med assistance address symptoms - Use cold pack to reduce swelling, use pad between skin and pack
	Brown Recluse	-Severe redness -Red circle around bite -Bite takes several months to heal		- Wash wound with soap & water - Request med assistance for allergic persons - Remove stinger without pinching or squeezing - Use cold pack to reduce swelling, use pad between skin and pack
	Ticks	-Flu like symptoms -Fever -Rash, joint pain, headaches		- Wash wound with soap & water - Request med assistance for allergic persons - Remove tick with oil, alcohol or heated tweezers - Use tweezers to remove imbedded head - If fever, rash, unusual markings develop around bite, contact physician
4. Prepared by:	5. Date/time briefed:	**Last Updated: 4/23/07**		**SSP-Attach 10: Insect Hazards** **Page _____ of _____**

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Animal Hazards Additional Attachments:	2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:
Hazard Type	Potential Sources	Signs & Symptoms	Control	Medical Treatment
Mammal Bites	Dogs, Cats Skunks, Raccoons Foxes, Badgers Wolves, Bears Cows	-Pain & tenderness of wound -Redness, heat, swelling -Puss under the skin -Red streaks around wound -Swollen lymph nodes in arm pits, groin & neck	- Recon area prior to work & identify nests & habitats - Identify animals & any unusual behavior - Relocate animals if necessary using wildlife experts - Report rabid animals to local wildlife authorities - Obtain emergency bite kits	- Get medical attention ASAP to address infection - Ensure tetanus shot is updated - Interview individual to determine appearance/disposition of animal - Control serious bleeding - Apply pressure using gauze pad, tourniquets are inadvisable - Wash before touching wound - Wear rubber gloves when treating victim - Wash wounds that are not bleeding heavily - Cover with clean dressing and bandage
		<u>Rabies</u> -Drooling -Irritability -Strange, abnormal behavior		- Get medical assistance immediately
Snake Bites	Coral Snakes Water Moccasins Rattle Snakes Pit Vipers Ticks	*Some or all of these symptoms may be present:* -Fang marks -Swelling, discoloration, pain -Heat around fang marks -Weakness, sweating, faintness, shock <u>Coral snake</u>: -Respiratory paralysis -Bizarre behavior -Unusual eye movement	- Recon area prior to work & identify nests & habitats - Place locations on SSP map - Identify animals & any unusual behavior - Relocate animals if necessary using wildlife experts - Report agressive animals to local wildlife authorities - Obtain emergency bite kits	- Get medical attention ASAP - Ensure tetanus shot is updated - Interview individual to determine appearance/disposition of snake - Control serious bleeding - Apply pressure using gauze pad, tourniquets are inadvisable - Wash before touching wound - Wear rubber gloves when treating victim - Wash wounds that are not bleeding heavily - Cover with clean dressing and bandage
				Poisoned Victim - Get immediate medical attention - Keep patient still to slow spread of venom - Place bite area below heart to slow venom - Wash with soap & water - Use splint to immobilize bitten arms/legs - Use cold pack with gauze before skin - Do not administer aspirin or alcohol - Do not suck out poison - Do not use tournequets
4. Prepared by:	5. Date/time briefed:	**Last Updated: 4/23/07**		**SSP-Attach 11: Animal Hazards** **Page ____ of ____**

CG ICS SSP SPECIFIC HAZARD ATTACHMENT	1. Hazard Marine Animal and Plant Hazards Additional Attachments:	2. Divisions/Groups/Units affected:		3. Job Tasks Involving Hazard:
Hazard Type	Potential Sources	Signs & Symptoms	Control	Medical Treatment
Animal Stings & Punctures	*Group I* Jellyfish, Portuguese Man-o-war Anemones Corals Hydras *Group II* Urchins, Cone Shells, Stingrays, Spiny fish	-Pain & tenderness of wound -Redness, heat, swelling -Puss under the skin -Red streaks around wound *Sensitive Individuals* -Allergic reactions -Respiratory arrest -Fainting -Infections & tetanus may develop	- Recon area prior to work & identify nests & habitats - Place locations on SSP map - Outfit workers with protective clothing for water activities and to prevent bites	- Get medical attention ASAP to address infection - Ensure tetanus shot is updated - Interview individual to determine appearance of animal - Control serious bleeding *Group I* - Do not rub or scratch affected area - Sprinkle alcohol on affected area, follow with meat tenderizer or talcum if available (denatures toxin) *Group II* - Soak in very warm water for 30 minutes - Do not use very hot water
Plants	Poison Ivy Poison Oak Poison Sumac	*Some or all of these symptoms may be present:* -Itching -Burning -Blistering -Rash & bumpy skin	- Recon area prior to work & identify plant types - Place locations on SSP map - Remove if necessary - Long sleeve shirts and pants should be worn - Gloves should be worn - Wash frequently during breaks & prior to departing work site. - Employ body screen salves	- If contact occurs, wash with soapy water immediately - Do not scratch - Provide medical attention of spreading is severe
4. Prepared by:	5. Date/time briefed:	**Last Updated: 4/23/07**		**SSP-Attach 11: Animal Hazards** Page ____ of ____

Baker

APPENDIX L

Emergency Public Affairs Plan

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NAVAL SUPPORT ACTIVITY (NSA) NAPLES PUBLIC AFFAIRS EMERGENCY RESPONSE PLAN

Purpose: To provide guidance on carrying out the Public Affairs function in support of Naval Support Activity Naples' response to a major disaster or emergency.

Concept of Operations: After a major disaster, normal means of communications in the affected area may be destroyed or severely disrupted; therefore, only limited and incomplete information may be expected from the area until communications can be restored.

The immediate release of internal emergency information is imperative to getting essential news and instructions out to the NSA Naples military, civilian personnel and their families. An initial release containing emergency information will be broadcast on AFN TV and radio, the NSA Web site at www.nsa.naples.navy.mil, and ALL HANDS E-mail message, if possible.

Response: After notification of an emergency or disaster, with NSA Naples commanding officer's approval, the NSA Naples PAO will make a report to the CNRE PAO and/or CNE PAO with the available details of the incident and request assistance, if necessary. The U.S. Embassy and Consulate General will be informed of internal and external communication action taken. Pertinent information will be received from the Emergency Operations Center (EOC) of the incident for on-site information.

The NSA PAO will work from the EOC with the PAO staff at their assigned office spaces in room 208, Admin 1. A staff photographer will be available for documentation of the event. Assistance will be required if there are media to escort.

Should either base threat condition be raised to DELTA, only ESSENTIAL personnel will be allowed access to the installation until the threatcon is relaxed. Be advised, Stars & Stripes have an office at NSA Naples Capodichino and has access to all U.S. military bases.

Dissemination of Subsequent/External Information: The NSA PAO will draft a proposed statement and response to (media) queries (RTQs) once sufficient information is obtained and the initial press release is complete. The statement and RTQs will be forwarded up the chain of command for approval by the NSA Naples commanding officer, CNRE PAO and CNE PAO, in that order.

Once the statement is approved for release, the PAO shall provide copies to the NSA Naples CO/XO, CNE/C6F PAO, CNRE PAO, U.S. Consulate PAO, CHINFO Duty Officer, AFN Naples OIC, and any

others deemed appropriate (U.S. Naval Hospital Naples PAO, etc.). The statement/press release will be sent to the media separately; RTQs are used to respond to questions from the media only and is not to be released to external media.

Command Information Bureaus (CIB): NSA Naples Public Affairs office has established two sites for CIBs, should the event arise in which external media require an extended stay on either the NSA Naples Capodichino compound or the Gricignano support site compound.

NSA Naples Capodichino: University of Maryland University College (UMUC) computer lab in room G049.1 in Admin II. POC: Ms. Mitzia Williams, UMUC Community Field Representative in Naples, (work) 081-568-6676 or (cell) 339-375-3699.

Gricignano support site: The Village Forum Library. POC: Mr. Tony Smith, NSA Naples MWR Director, (work) 626-4050 or (cell) 335-729-5783.

These sites were selected to keep the media separate from the Command Suite and the EOC and still allow them to be functional. At all times a PA specialist will be located in the CIB.

Scope: The mission of Public Affairs is to provide timely, accurate and essential information to the military community and those civilians working for the U.S. government in the event of a disaster by using all available means of communication. Specific objectives are to:

- Instill confidence that NSA Naples' Emergency Response Team will conduct response and recovery operations fast, effectively, efficiently and safely.
- Provide critical information including how to apply for assistance and the location and status of life-sustaining shelters and resources; and
- Provide authoritative information to quail unsubstantiated rumors.

Policies in Theory: Approval by the Commanding Officer, NSA Naples, and coordination with the U.S. Consulate Public Affairs Office is required before any public release of information. The U.S. Embassy and Consul General should be informed of internal communications actions taken. The Public Affairs Officer or designated representative is the only person who can release information to the news media.

PAO Contact List

- NSA Naples PAO (Naval Support Activity Naples)
LT Paul Macapagal
DSN: 626-5907/5912; cell: 011-39-331-674-6097
Paul.macapagal@eu.navy.mil

- USNH Naples PAO (U.S. Naval Hospital, Naples)
HMCS Lilley, collateral PAO
DSN: 629-6476; cell: 335-720-0508
dlilley@naples.med.navy.mil

- AFN Naples OIC (American Forces Network)
ICCS Carson, Detachment OIC
DSN: 629-6900/6901/6903; cell: 335-710-2311
kevin.carson@afn.naples.army.mil

- CNRE PAO (Commander, Navy Region Europe)
LCDR Braun, PAO/JOC Musser, DPAO
DSN: 626-4727/4722; cell: 39-335-719-5414 pao@cnre.navy.mil

- C6F PAO (U.S. Sixth Fleet)
CDR Darryn James, PAO
DSN: 314-626-8197; cell: 011-39-335-719-9661
jamesd@med.naples.navy.mil

- CNE PAO (Commander, U.S. Naval Forces Europe)
CDR Mark McDonald, PAO
DSN: 314-626-8197; Commercial: 011-39-081-568-3070; cell: 39-335-721-4903
mcdonam@med.naples.navy.mil

- U.S. Consulate, Naples, Italy
Mr. Bennett Y Lowenthal, PAO
DSN: 081-66-99-89; cell: 0335-846-8031
LowenthalBY@state.gov

- CHINFO Duty Officer (Chief of Naval Operations), Washington, D.C. DSN: 312-227-5342 (regular hours) or 312-227-7391 (after hours)
Chinfo.dutyoffic.fct@navy.mil

APPENDIX M

SOP for Inventory Control and Fuel Transfer Operations

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Standard Operating Procedure
Inventory Control and Fuel Transfer Operations
NSA Naples, Italy

Purpose: The purpose of this Standard Operating Procedure is to minimize the potential for release of POL during refueling of PSTs, and to track the delivery of POL. This SOP is to be employed for refilling all PSTs (i.e. diesel emergency generators) on board Naval Support Activity Naples and its support sites.

Procedure:

1. Pre-operational checks will be performed on all equipment prior to receiving or issuing fuel.
2. Fuel will be issued only to equipment authorized by the U. S. Government.
3. All operators of fuel trucks will notify the designated PW POC of their departure, destination and estimated time of return (ETR).
4. Only approved routes will be traveled unless authorized to deviate from the route by management.
5. Loading and unloading procedures are completed in accordance with the Petroleum Storage Tank Management Plan (STMP) and the Spill Prevention, and Response Plan (SPRP).
6. Perform visual site inspection:
   a. Tank / Drainage valves closed
   b. Water in containment
   c. Evidence of spills
   d. Cracks in containment
   e. Obvious signs of damage – Rust / Leakage
   f. Are high level alarms working?
   g. Is corrosion protection working?
   h. Is leak detection working?

Reports

1. Provide daily status / fuel report in US gallons through the supervisory chain.
2. Supervisory chain will submit (1) Monthly Abstract of Issues of Petroleum Product, (2) Monthly Petroleum Accounting Summary to the designated PW POC.

Fuel Accountability

1. Fuel operators and drivers will measure using "Calibrated Gauging Sticks," the quantity contained in tanks prior to commencing transfer operations.
2. Fuel operators will compare gauging stick reading to the Liquid Level Gauge (LLG).
3. Gauge tanks in line haul vehicles prior to receiving fuel to verify tank capacity is low enough to receive fuel.

4. Take precautions to prevent spills. Place mats over storm drains and drainage tubs/containers under hose connections, faucets, etc.
6. Re-gauge tanks to verify the quantity delivered.
7. Fuel operator closes out and signs Daily Issues of Petroleum Products form and turns in to Supervisor.

Fuel Point Fueling Procedures

1. For all petroleum operations, always bond and ground equipment.
2. Strictly enforce NO SMOKING rules.
3. Ensure vehicle engines are switched off prior to re-fueling.
4. Wear fuel-resistant or rubber gloves and eye protection when fueling vehicle or stationary equipment.
5. Inspect work area prior to transfer. Keep free of loose tools, lumber, and other objects that may cause accidents.
6. Check for water inside secondary containment and check for water inside tank using water-finding paste.
7. The tank is gauged to determine the amount of fuel that can be safely added, allowing a minimum of 10% of capacity for expansion. Complete entries on the fuel issue log sheet.
8. Place spill mats over storm drains to prevent migration of any spill.
9. Use drip pans during fueling operations.
10. Immediately clean up and report spills.
11. Following transfer, gauge the tank again and verify amount of product transferred.
12. Stop fueling operations (as, applicable), when there are lightening discharges within 5 miles. Monitor communications channels for weather warnings whenever the potential exists. If no warnings are received, but lightning is observed, one option is to use the "flash to bang" method to determine distance to the lightning. Count the number of seconds between the flash and the bang and divide by five to get the rough distance to the lightning. Twenty-five seconds or less from flash to bang will be cause for site closure.
13. Any employee has authority to close down the site for safety reasons.