

# References

This appendix provides reference tools to help readers understand the material in this report. Information is provided on terms and acronyms used in the report. Site types and site counts give additional information about funding and site content. Contact information and web addresses allow readers to seek additional information, beyond the scope of this text. Sections included in this reference section:

Site Types - Definitions .....	<b>E-2</b>
Site Types - Counts .....	<b>E-7</b>
Glossary .....	<b>E-9</b>
Acronyms .....	<b>E-19</b>
Statutory Requirements.....	<b>E-23</b>
Web Sites.....	<b>E-27</b>
Whom to Contact.....	<b>E-31</b>



# Site Types -- Definitions

Site Category	Site Type	Site Description <sup>1</sup>	Primary Contaminants
Base Operations/ Engineered Structures	Building Demolition/ Debris Removal	Building Demolition/Debris Removal sites consist of buildings and/or debris that are unsafe and/or must be removed.	<ul style="list-style-type: none"> <li>• Asbestos</li> <li>• Construction debris</li> <li>• Lead paint</li> </ul>
	Contaminated Building	Contaminated Building sites result from releases within or on the outside of a structure of a substance that has been contained within the building.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Plating waste</li> <li>• Metals</li> <li>• POL sludge</li> </ul> <ul style="list-style-type: none"> <li>• Asbestos</li> <li>• PCBs</li> <li>• Propellants</li> <li>• Pesticides</li> </ul> <ul style="list-style-type: none"> <li>• Solvents</li> <li>• Acids</li> </ul>
	Dip Tank	Dip Tanks typically are metal or concrete units located in coating shops. They range in size from 50 to more than 500 gallons. The tanks are used to clean parts before treatment or to coat parts with various materials, including metals and plastics.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Chlorinated solvents</li> <li>• Metals</li> <li>• Acids</li> </ul>
	Incinerator	Incinerators typically consist of a furnace and stack unit used for a variety of disposal activities, including the incineration of medical waste or of an installation's dunnage. These units vary in size and may be either freestanding or part of other operations, such as hospitals.	<ul style="list-style-type: none"> <li>• Ash</li> <li>• Metals</li> <li>• Ordnance compounds</li> </ul>
	Maintenance Yard	Maintenance Yards consist of paved or unpaved areas where vehicles and other maintenance equipment are stored and often serviced. Typically, maintenance supplies are stored at these units.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• Metals</li> </ul>
	Oil Water Separator	Oil Water Separators typically are small units that skim oil from stormwater runoff. The Oil Water Separator site consists of the unit and any associated piping.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• Industrial wastewater</li> </ul> <ul style="list-style-type: none"> <li>• PCBs</li> </ul>
	Storage Area	Storage Area sites are areas where spills and leaks from stored containers or equipment have occurred.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• POL sludge</li> </ul> <ul style="list-style-type: none"> <li>• Metals</li> <li>• Acids</li> <li>• PCBs</li> </ul>
	Washrack	Washrack sites typically consist of a building designed for washing vehicles, such as tanks, aircraft, and other military vehicles. This unit also may consist of a paved area where washing of vehicles occurs.	<ul style="list-style-type: none"> <li>• POLs</li> </ul>
Storage Tanks	Aboveground Storage Tanks	Aboveground Storage Tank sites result from release of substances to surrounding areas from aboveground tanks, containers, and associated piping.	<ul style="list-style-type: none"> <li>• POLs (for example, heating oil, jet fuel, gasoline, and POL sludge)</li> </ul>

<sup>1</sup> The site descriptions provided in this table are not intended to be all-encompassing or exact regulatory definitions. They provide only general descriptions of the different categories of DoD sites.

**Note: Acronyms used** PCBs = Polychlorinated biphenyls

POL = Petroleum/Oil/Lubricants

UXO = Unexploded ordnance

## Site Category

## Site Type

Site Description <sup>1</sup>

## Primary Contaminants

POL Lines	Petroleum, oil, lubricant distribution lines are used to transport POL products from storage to dispensing facilities.	<ul style="list-style-type: none"> <li>• POLs (for example, heating oil, gasoline, jet fuel, diesel, and other fuels)</li> <li>• POL sludge</li> </ul>
Underground Storage Tanks	Underground Storage Tank sites result from the release of substances from underground storage tanks and any associated piping.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• POL sludge</li> <li>• Solvents</li> </ul>
Underground Storage Tank Farm	Underground Storage Tank Farm sites result from the release of substances from the multiple, generally large, underground storage tanks and associated piping that make up a tank farm complex.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• POL sludge</li> <li>• Solvents</li> <li>• Metals</li> </ul>
Optical Shop	Optical Shops typically consist of laboratory units located within a building. Activities include grinding lenses used in eye glasses or other optical instruments.	<ul style="list-style-type: none"> <li>• Solvents</li> </ul>
Pesticide Shop	Pesticide Shops typically are used to store and prepare large volumes of pesticides and solvents for maintenance activities. The units may be located in a freestanding building or may be attached to another building. Areas near the unit may have been used for the disposal of off-specification pesticides.	<ul style="list-style-type: none"> <li>• Pesticides</li> <li>• Metals</li> <li>• POLs</li> </ul>
Plating Shop	Plating Shops typically consist of a building, or a room within a building, used for coating metal parts. The unit contains several tanks of solvents that are used in the plating process.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Solvents</li> <li>• Acids</li> <li>• Industrial wastewater</li> </ul>
Sewage Treatment Plant	Sewage Treatment Plants typically consist of a complex of tanks, piping, and sludge management areas used to treat sanitary sewage generated at an installation. The unit may use chemical or biological treatment methods. Lagoons associated with the biological treatment of sewage may be considered to be separate units.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Industrial wastewater</li> <li>• Solvents</li> <li>• POLs</li> </ul>
Waste Lines	Waste Lines are underground piping used to carry industrial wastes from shop facilities to a wastewater treatment plant.	<ul style="list-style-type: none"> <li>• Solvents</li> <li>• Plating sludge</li> <li>• Explosive chemicals</li> </ul>
Waste Treatment Plant	Waste Treatment Plant sites result from releases of substances at plants that were used to treat and dispose of domestic and/or industrial wastewater.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• Plating sludge</li> </ul>

## Industrial Operations

<sup>1</sup> The site descriptions provided in this table are not intended to be all-encompassing or exact regulatory definitions. They provide only general descriptions of the different categories of DoD sites.

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Site Category	Site Type	Site Description <sup>1</sup>	Primary Contaminants
Training Areas	Burn Area	Burn Area sites consist of pits or surface areas that were used for open-air incineration of waste.	<ul style="list-style-type: none"> <li>• POLs (for example, spent motor oil and jet fuel)</li> <li>• Solvents (for example, spent paint thinners and degreasing agents)</li> <li>• Explosives</li> <li>• Propellants</li> <li>• Ordnance</li> </ul>
	Explosive Ordnance Disposal Area	Explosive Ordnance Disposal Areas consist of open-air areas that were used for detonation, demilitarization, burial, or disposal of explosives.	<ul style="list-style-type: none"> <li>• UXO</li> <li>• Ordnance compounds</li> <li>• Explosive chemicals</li> <li>• Metals</li> </ul>
	Fire/Crash Training Area	Fire /crash rescue training areas consist of trenches and/or pits where flammable materials were ignited periodically for demonstrations and training exercises.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• POL sludges</li> <li>• Metals</li> </ul>
	Firing Range	Firing Ranges consist of large areas of land used for practice firing of large artillery or mortars, or as a practice bombing range for aircraft. These areas typically are contaminated with unexploded ordnance, which may be found both on and below the ground surface.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Ordnance compounds</li> <li>• Explosives</li> <li>• UXO</li> <li>• Radionuclides</li> </ul>
	Pistol Range	Pistol Ranges may be located indoors or outdoors and are used for target practice. Outdoor units include a soil or sandbag berm located behind the targets to prevent bullets from traveling outside the range area.	<ul style="list-style-type: none"> <li>• Metals</li> </ul>
	Small Arms Range	Small Arms Ranges typically are located outdoors and are used for target practice with small arms, usually 50 caliber or less. The unit may include a soil or sandbag berm or a hill located behind the targets to prevent bullets from traveling outside the range area.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Ordnance compounds</li> </ul>
	Unexploded Munitions/ Ordnance Area	Unexploded Munitions/Ordnance Areas are areas that have been used for munition and ordnance training.	<ul style="list-style-type: none"> <li>• UXO</li> <li>• Metals</li> <li>• Explosive chemicals</li> <li>• Ordnance compounds</li> </ul>
	Radioactive Areas	Mixed Waste Area	Mixed Waste Areas are areas used to store or dispose of hazardous wastes that have been mixed with or contaminated by radioisotopes.
Radioactive Waste Area		Radioactive Waste Areas are areas used to store or dispose of low-level radioactive materials of various types (for example, radium paint and radioactive instruments and propellants).	<ul style="list-style-type: none"> <li>• Low-level radioactive waste</li> </ul>

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**Note: Acronyms used** PCBs = Polychlorinated biphenyls      POL = Petroleum/Oil/Lubricants      UXO = Unexploded ordnance

Site Category	Site Type	Site Description <sup>1</sup>	Primary Contaminants
Surface Discharge Areas	Drainage Ditch	Drainage Ditch units typically consist of a natural or man-made ditch used as a runoff control structure for rainfall. The unit also may be used for runoff from other sources, such as process operations. Man-made units may be concrete lined.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• PCBs</li> </ul> <ul style="list-style-type: none"> <li>• Metals</li> <li>• Explosive chemicals</li> </ul>
	Industrial Discharge	Industrial Discharge units consist of a pipe system used to discharge industrial effluent to the environment. The unit may discharge to a natural or man-made water body or to a dry creek bed or some other natural feature.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Industrial wastewater</li> </ul>
	Sewage Effluent Settling Ponds	Sewage Effluent Settling Ponds consist of a lagoon, or lagoons, used for the settling of solids and/or for biological treatment of sewage. The units also may be used as infiltration galleries.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Ordnance compounds</li> <li>• Solvents</li> </ul>
	Spill Site Areas	Spill Site Areas are small areas where spills from drums, tanks, or other waste storage units have taken place.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• Paint</li> <li>• Pesticides</li> </ul> <ul style="list-style-type: none"> <li>• Metals</li> <li>• Acids</li> <li>• PCBs</li> </ul>
	Storm Drain	Storm Drains typically consist of a natural or man-made drain used as a runoff control structure for rainfall. The unit also may be used for runoff from other sources, such as process operations. Man-made units may be concrete lined.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Metals</li> <li>• POL sludge</li> </ul> <ul style="list-style-type: none"> <li>• Pesticides</li> <li>• Industrial wastewater</li> <li>• Solvents</li> </ul>
	Surface Disposal Area	Surface Disposal Area sites consist of small areas formerly used for disposal of solid wastes with little or no free liquids. Typical materials include rags, filters, paint cans, small capacitors, and batteries.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Metals</li> </ul> <ul style="list-style-type: none"> <li>• Solvents</li> <li>• Explosive chemicals</li> </ul>
	Surface Impoundment/Lagoon	Surface Impoundments/Lagoons are unlined depressions, excavations, or diked areas that were used to accumulate liquid waste, waste containing free liquid, or industrial wastewater.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• Ordnance compounds</li> <li>• Explosive chemicals</li> <li>• Metals</li> </ul> <ul style="list-style-type: none"> <li>• Industrial wastewater</li> </ul>
	Surface Runoff	Surface Runoff sites are areas with sheet runoff from rain. This may occur anywhere within a facility, particularly adjacent to industrial areas and airfield aprons.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• PCBs</li> </ul> <ul style="list-style-type: none"> <li>• Metals</li> <li>• POL sludge</li> </ul>
Subsurface Disposal Area	Chemical Disposal	Chemical Disposal units are areas that have been used for the disposal of chemicals, typically of an unknown type. The unit may be a burial area where bottles or packages of chemicals were placed or an area where liquids were disposed of on the soil.	

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Site Category	Site Type	Site Description <sup>1</sup>	Primary Contaminants	
Subsurface Disposal Area (cont.)	Disposal Pit/Dry Well	Disposal Pit/Dry Well sites consist of small unlined excavations and structures that were used over a period of time for disposing of small quantities of liquid wastes.	<ul style="list-style-type: none"> <li>• POLs (for example, motor oil)</li> <li>• Acids (for example, battery acid)</li> </ul>	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Explosive chemicals</li> <li>• Ordnance compounds</li> <li>• Solvents</li> </ul>
	Landfill	Landfill sites typically are areas formerly used for disposing of both domestic and industrial hazardous waste.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Solvents</li> <li>• Paint</li> </ul>	<ul style="list-style-type: none"> <li>• Pesticides</li> <li>• Metals</li> <li>• Ordnance Compounds</li> </ul>
	Leach Field	Leach Fields typically consist of a subsurface area generally associated with septic tanks. The unit serves the purpose of biologically treating sanitary sewage; however, in cases where these units were used at industrial facilities, there is also contamination from non-biodegradable industrial contaminants.	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Solvents</li> </ul>	
Contaminated Media	Contaminated Fill	Contaminated Fill areas consist of contaminated fill resulting from excavations for construction, tanks, and other purposes.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Metals</li> <li>• Ordnance compounds</li> </ul>	<ul style="list-style-type: none"> <li>• Explosive chemicals</li> <li>• Paint waste</li> </ul>
	Contaminated Groundwater	Contaminated Groundwater results from various types of releases of known or unknown origin, such as migration of leachate from disposal areas and migration of substances from contaminated surface and subsurface soil.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Chlorinated solvents</li> <li>• Nonchlorinated solvents</li> </ul>	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Explosive chemicals</li> </ul>
	Contaminated Sediments	Contaminated Sediments include sediments of bodies of water that have been contaminated by surface runoff, subsurface migration, or direct discharge of contaminants.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• PCBs</li> <li>• Pesticides</li> </ul>	<ul style="list-style-type: none"> <li>• Metals</li> <li>• Solvents</li> <li>• Explosive chemicals</li> </ul>
	Contaminated Soil Piles	Contaminated Soil Piles consist of soil that has been staged after an excavation activity.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• Sludge</li> <li>• Metals</li> </ul>	<ul style="list-style-type: none"> <li>• Solvents</li> <li>• PCBs</li> <li>• Ordnance compounds</li> </ul>
	Soil Contaminated After Tank Removal	Soil Contaminated After Tank Removal consists of soil that has been removed during a tank removal operation and staged before treatment.	<ul style="list-style-type: none"> <li>• POLs</li> <li>• POL sludge</li> </ul>	

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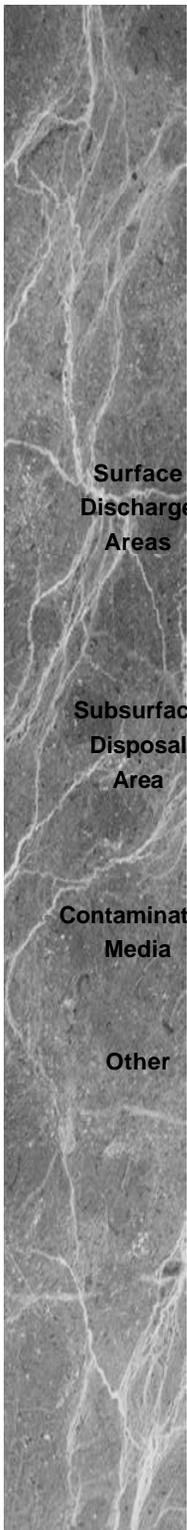
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# Site Types -- Counts

Site Types	Army		Navy		Air Force		DLA		DSWA		FUDS	
	Total Sites	Sites in Progress										
Building Demolition/Debris Removal	30	17	23	14	3	0	0	0	1	1	343	157
Contaminated Buildings	790	208	61	35	60	35	65	27	0	0	34	17
Dip Tank	40	1	5	5	2	2	5	3	0	0	0	0
Incinerator	86	36	19	9	4	0	5	2	0	0	7	5
Maintenance Yard	124	63	47	42	16	4	1	1	0	0	2	2
Oil Water Separator	427	37	44	23	79	27	3	1	0	0	1	0
Storage Area	2783	347	581	309	145	46	103	59	5	5	58	27
Washrack	178	42	10	7	8	4	3	3	0	0	0	0
<b>Total</b>	<b>4458</b>	<b>751</b>	<b>790</b>	<b>444</b>	<b>317</b>	<b>118</b>	<b>185</b>	<b>96</b>	<b>6</b>	<b>6</b>	<b>445</b>	<b>208</b>
Aboveground Storage Tanks	343	72	86	67	67	32	13	7	0	0	100	53
POL (Petroleum/Oil/Lubricants) Lines	43	37	75	55	74	48	9	3	0	0	24	13
Underground Storage Tanks	1354	209	742	372	964	386	66	20	0	0	673	277
Underground Tank Farm	98	46	90	52	9	3	1	1	0	0	26	13
<b>Total</b>	<b>1838</b>	<b>364</b>	<b>993</b>	<b>546</b>	<b>1114</b>	<b>469</b>	<b>89</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>823</b>	<b>356</b>
Optical Shop	2	1	0	0	0	0	0	0	0	0	0	0
Pesticide Shop	44	23	15	11	8	3	7	5	0	0	1	1
Plating Shop	9	6	11	9	1	0	1	0	0	0	1	1
Sewage Treatment Plant	58	17	12	7	64	32	1	0	0	0	4	3
Waste Lines	149	52	70	45	33	16	3	2	0	0	5	4
Waste Treatment Plant	242	70	37	20	44	20	0	0	0	0	1	1
<b>Total</b>	<b>504</b>	<b>169</b>	<b>145</b>	<b>92</b>	<b>150</b>	<b>71</b>	<b>12</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>10</b>
Burn Area	240	163	69	48	23	12	19	7	0	0	16	16
Explosive Ordnance Disposal Area	159	83	48	36	29	10	0	0	0	0	69	60
Fire/Crash Training Area	91	59	124	97	321	168	3	2	1	1	10	8
Firing Range	53	30	16	7	6	4	0	0	0	0	92	63
Pistol Range	19	11	9	4	4	4	4	2	0	0	2	0
Small Arms Range	66	25	4	3	8	3	1	1	0	0	36	16
Unexploded Munitions/Ordnance Area	189	67	47	27	20	7	0	0	0	0	534	373
<b>Total</b>	<b>817</b>	<b>438</b>	<b>317</b>	<b>222</b>	<b>411</b>	<b>208</b>	<b>27</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>759</b>	<b>536</b>
Mixed Waste Area	29	24	28	17	12	8	2	1	0	0	7	2
Radioactive Waste Area	55	32	9	3	77	23	0	0	5	5	7	4
<b>Total</b>	<b>84</b>	<b>56</b>	<b>37</b>	<b>20</b>	<b>89</b>	<b>31</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>14</b>	<b>6</b>

Site Types	Army		Navy		Air Force		DLA		DSWA		FUDS	
	Total Sites	Sites in Progress	Total Sites	Sites in Progress	Total Sites	Sites in Progress	Total Sites	Sites in Progress	Total Sites	Sites in Progress	Total Sites	Sites in Progress
Drainage Ditch	37	28	21	18	11	3	5	5	0	0	1	1
Industrial Discharge	87	63	11	7	9	4	0	0	0	0	2	2
Sewage Effluent Settling Ponds	15	10	2	2	6	4	0	0	0	0	3	2
Spill Site Area	772	333	421	229	1543	781	38	21	12	11	13	10
Storm Drain	22	9	12	12	74	61	6	4	0	0	2	2
Surface Disposal Area	590	242	704	349	404	209	6	2	1	1	36	25
Surface Impoundment/Lagoon	295	185	104	67	25	12	10	6	3	3	26	16
Surface Runoff	55	23	11	8	4	4	0	0	0	0	4	1
<b>Total</b>	<b>1873</b>	<b>893</b>	<b>1286</b>	<b>692</b>	<b>2076</b>	<b>1078</b>	<b>65</b>	<b>38</b>	<b>16</b>	<b>15</b>	<b>87</b>	<b>59</b>
Chemical Disposal	45	36	4	4	26	23	0	0	0	0	14	7
Disposal Pit/Dry Well	351	173	144	87	534	250	54	31	1	0	17	13
Landfill	893	543	428	276	761	421	18	11	7	7	90	70
Leach Field	61	43	5	4	8	2	1	1	0	0	0	0
<b>Total</b>	<b>1350</b>	<b>795</b>	<b>581</b>	<b>371</b>	<b>1329</b>	<b>696</b>	<b>73</b>	<b>43</b>	<b>8</b>	<b>7</b>	<b>121</b>	<b>90</b>
Contaminated Fill	58	41	25	16	8	6	79	4	0	0	97	80
Contaminated Groundwater	212	186	93	78	41	23	17	16	0	0	184	138
Contaminated Sediments	189	142	115	67	25	17	16	4	0	0	52	41
Contaminated Soil Piles	42	30	16	14	1	0	20	3	0	0	16	8
Soil Contamination After Tank Removal	78	45	8	6	9	3	28	8	0	0	100	65
<b>Total</b>	<b>579</b>	<b>444</b>	<b>257</b>	<b>181</b>	<b>84</b>	<b>49</b>	<b>160</b>	<b>35</b>	<b>0</b>	<b>0</b>	<b>449</b>	<b>332</b>
Other	885	24	42	27	238	127	33	16	0	0	1418	903
<b>Grand Total</b>	<b>12388</b>	<b>3934</b>	<b>4448</b>	<b>2595</b>	<b>5808</b>	<b>2847</b>	<b>646</b>	<b>279</b>	<b>36</b>	<b>34</b>	<b>4128</b>	<b>2500</b>



Surface Discharge Areas

Subsurface Disposal Area

Contaminated Media

Other

# Glossary

**Administrative Record (AR)**

CERCLA requires establishment of an administrative record, which forms the basis for the selection of a response action. The administrative record should include the final documents that are a part of the decision-making process.

**Air Sparging**

A remedial process in which pressurized air is injected below the groundwater table for removal of contaminants through volatilization.

**Applicable or Relevant and Appropriate Requirement (ARAR)**

Requirements that must be met in complying with CERCLA. ARARs include cleanup standards, standards of control, and other substantive environmental protection criteria for hazardous substances, as specified by federal and state law and regulations.

**Base Realignment and Closure (BRAC)**

A DoD program that focuses cleanup efforts at military installations undergoing closure or realignment. The goal of the program is to make property available for transfer to the community as quickly and efficiently as possible.

**Bioslurping**

A device used to extract free-phase fuel from groundwater. The bioslurper uses a vacuum to draw petroleum to a well, then “slurps” the petroleum from the top of the groundwater. The vacuum action also draws air into the soil, which promotes microbial biodegradation. Bioslurping removes the contamination source and cleans up the contaminated soil as well.

**Bioventing**

A process by which oxygen is delivered to contaminated unsaturated soil by forced air movement (extraction or injection) to stimulate biodegradation by increasing oxygen concentrations.

**BRAC Cleanup Plan (BCP)**

A plan developed by the installation’s cleanup team to map the restoration work needed to make property available for transfer. The BCP includes schedules and estimated costs for the environmental restoration work needed to support the transfer and reuse of property at an installation.

**Characterization**

Facility or site sampling, monitoring, and analysis to determine the extent and nature of a contaminant release. Characterization is the first step in acquiring the necessary technical information to develop, screen, analyze, and select appropriate cleanup techniques.



**Clean Air Act (CAA)**

CAA's purpose is to "protect and enhance the quality of the Nation's air resources." Its primary programs regulate new and existing polluting facilities releases of contaminants to air.

**Cleanup**

The act of constructing and implementing a final cleanup remedy.

**Clean Water Act (CWA)**

CWA's objective is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The Act's major enforcement tool is the National Pollutant Discharge Elimination System (NPDES) permit.

**Closure Plan**

Documentation prepared under RCRA to guide the deactivation, stabilization, and surveillance of a waste management unit or facility.

**Community Environmental Response Facilitation Act of 1992 (CERFA)**

Law requiring the federal government to identify, for each facility, real property that is not contaminated and that offers the greatest opportunity for expedited reuse and redevelopment by the community. Either identified parcels of real property must be free from hazardous substances and petroleum products or the remediation of contamination by such substances should be expedited to facilitate transfer of the property to the public.

**Community Redevelopment Plans**

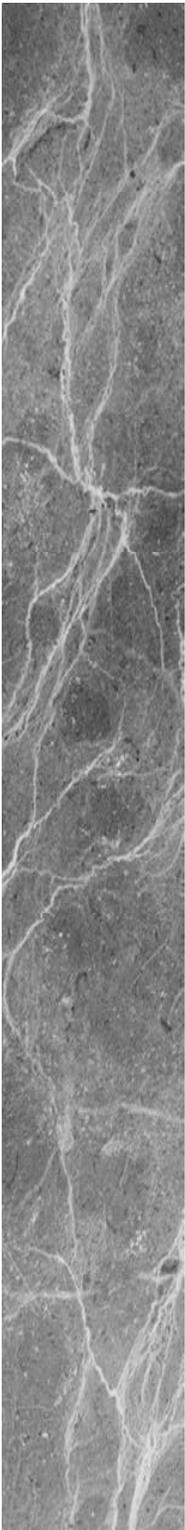
Plans that help direct environmental restoration efforts to areas with the greatest potential for reuse and for providing economic benefit to the community. These community-prepared plans identify the desired and anticipated reuse of excess installation property.

**Community Relations Plan (CRP)**

The plan for community relations activities that an installation will use to meet stated objectives. A CRP must be developed and implemented for all Removal Actions and Remedial Actions at Installation Restoration sites, except for emergency responses.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**

A federal statute that establishes a comprehensive framework to identify, investigate, and clean up releases of hazardous substances to the environment. It provides the statutory authority for cleanup of hazardous substances that could endanger public health, public welfare, or the environment.

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- Corrective Action Plan (CAP)** A plan associated with the Underground Storage Tank Program. It describes the appropriate corrective measures for implementation at a site. Equivalent to a CERCLA Feasibility Study.
- Corrective Measures Implementation (CMI)** The RCRA Corrective Action phase in which the selected cleanup technology is constructed, installed, implemented, and/or operated until confirmatory sampling and analysis indicate that cleanup levels have been reached. Equivalent to a CERCLA Remedial Action.
- Corrective Measures Study (CMS)** The RCRA Corrective Action phase in which alternative cleanup technologies are evaluated in relation to specific site characteristics, such as contaminants, soil conditions, and hydrogeologic conditions. Equivalent to a CERCLA Remedial Investigation.
- Defense Planning Guidance (DPG)** The DPG establishes goals and milestones for the Defense Environmental Restoration Program. The goals include protecting human health and the environment and making BRAC property environmentally suitable for transfer and reuse in support of the President's plan for economic revitalization. Four Measures of Merit have been established to gauge progress toward these goals.
- Defense Site Environmental Restoration Tracking System (DSERTS)** A microcomputer-based system used to track environmental restoration activities at active installations. The system collects and maintains site-related information about environmental remediation and provides reports that detail information at the DoD Component level.
- Design** Performance specifications or detailed engineering plans and specifications for constructing and implementing a final cleanup remedy.
- Drinking Water Standard** Concentration limits for certain elements and pollutants that may occur in drinking water. Established by the Safe Drinking Water Act.
- Environmental Baseline Survey (EBS)** Survey identifying real and excess property that can be considered uncontaminated as defined by CERFA. In addition to documenting uncontaminated property, the EBS numerically describes the environmental condition of the remaining property according to its status in the restoration process. The EBS is used to identify property available for transfer to the community.



**Feasibility Study (FS)**

A step in the CERCLA environmental restoration process. The objectives of the FS are to identify alternatives for remediation and to select and describe a Remedial Action that satisfies the applicable or relevant and appropriate requirements for mitigating confirmed environmental contamination. Successful completion of the FS should lead to unimpeded development of a Remedial Design for implementation of the selected Remedial Actions.

**Federal Facility Agreement (FFA)**

A legal agreement between DoD and EPA concerning the cleanup of sites on the National Priorities List. This agreement is intended to establish roles, responsibilities, and schedules and to improve communications among all parties. A FFA will become an Interagency Agreement when the statutory requirements are incorporated after the Record of Decision is complete.

**Finding of Suitability to Lease (FOSL)**

The process that documents the determination that property can be leased, even while cleanup is under way. The FOSL also identifies any applicable restrictions that must accompany the lease and provides a statement of notice and access requirements under CERCLA and other lease restrictions, as appropriate.

**Finding of Suitability to Transfer (FOST)**

The process that documents the determination that property is environmentally suitable for transfer by deed for an intended use. The FOST also identifies any applicable restrictions on future use and provides a statement of the notice, covenant, and access requirements under CERCLA.

**Formerly Used Defense Sites (FUDS)**

The remediation process at FUDS parallels Installation Restoration Program (IRP) process phases, but the program structure is different. The FUDS program has two major components, inventory and remediation. In the inventory phase, eligible projects are identified. The remediation phase includes all components of the IRP: Preliminary Assessment/Site Inspection, Remedial Investigation/Feasibility Study, Record of Decision, and Remedial Design/Remedial Action. The FUDS program is implemented by the U.S. Army Corps of Engineers.

**Groundwater Remediation**

Treatment of groundwater to remove pollutants.

**Hazardous and Solid Waste Amendments (HSWA)**

These are 1984 amendments to RCRA. They provide authority for the investigation and cleanup of waste sites, creating a corrective action program substantially equivalent to that under CERCLA, although some of the requirements are different. HSWA also created the Underground Storage Tank Program.

**Hazardous Waste**

As defined in RCRA, solid waste or a combination of solid wastes that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or pose a substantial present or potential hazard to human health or the environment if improperly treated, stored, transported, disposed of, or otherwise managed.

**Information Repository**

An installation's repository for copies of Installation Restoration Program (IRP) items that are made available to the public, including brochures or fact sheets, press releases, documents in the administrative record, information on the IRP, and the applicable laws. The repository should be available to the public during Removal Actions and Remedial Actions at hazardous waste sites and should be located at or near the site of the response action.

**Initial Site Characterization (ISC)**

A collection of information about the site, such as the nature and estimated quantity of contaminant releases; surrounding populations; water quality, use, and well locations; stormwater and wastewater systems; climatology; land use; results of the site check and initial abatement measures; and results of any free-product removals. Equivalent to a CERCLA Preliminary Assessment, the site characterization should be performed after the discovery of a release from a UST and after completion of the site check. It must be done under the RCRA UST program.

**Installation Restoration Program (IRP)**

Program designed to clean up contamination associated with DoD facilities. Includes identification, investigation, and cleanup of hazardous substances, pollutants and contaminants as defined by CERCLA; DoD-unique materials; and POL contamination at operating and closing/realigning installations (including off-installation areas to which contamination has migrated) and at FUDS.

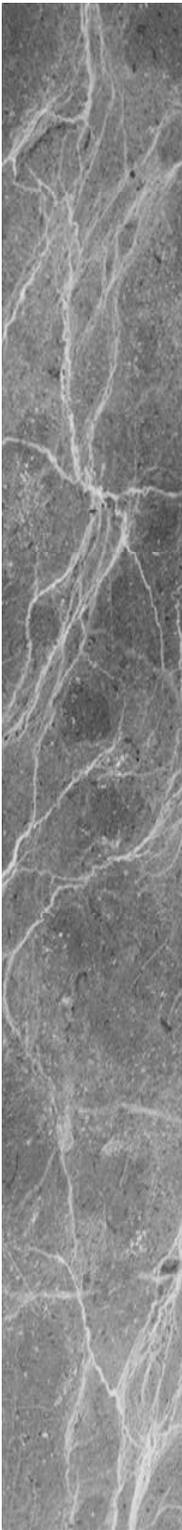
**Interagency Agreement (IAG)**

A formal document in which two or more federal agencies agree to cooperate. For any installation listed on the National Priorities List, the service must enter into an IAG within 180 days of the required EPA review of the RI/FS. This IAG must identify all Remedial Actions required at the site.

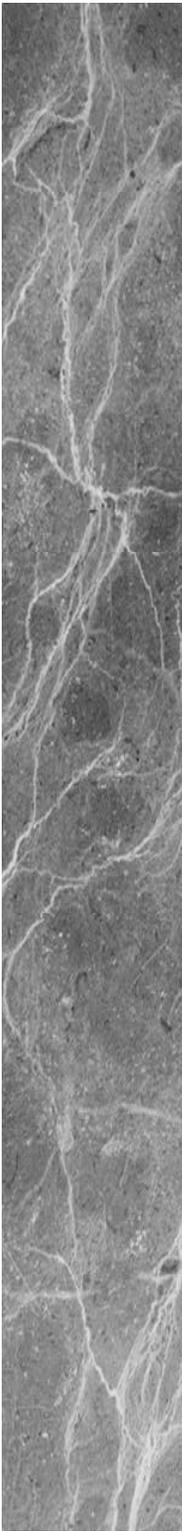
**Interim Action (IA)**

An early measure to reduce the risk of releases of hazardous substances before the initiation of more complicated, comprehensive, and long-term cleanup remedies. Examples of IAs are placing fences around contaminated areas and removing and treating or disposing of contaminated soil.



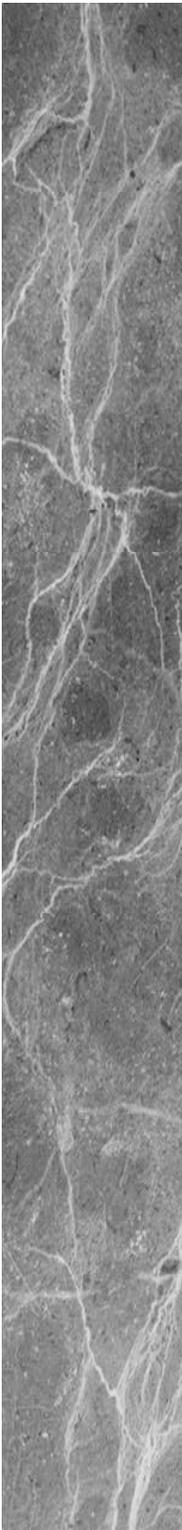


<b>Interim Remedial Action (IRA)</b>	An interim measure that can be implemented at any time in the restoration process and is designed to abate contamination until the final Remedial Action can be implemented.
<b>Investigation</b>	Analysis used to characterize the nature, extent, and risk of releases of hazardous substances into the environment and to develop and select a cleanup remedy.
<b>Long-Term Monitoring (LTM)</b>	Comprehensive evaluation of a site or sites through physical and/or electronic sampling and analysis to demonstrate that a particular Remedial Action has worked or is continuing to work or to show a continuing low concentration of contaminants that does not require Remedial Action.
<b>Long-Term Operations (LTO)</b>	Procedures that are initiated after a cleanup remedy has been put in place and that are necessary for maintaining the effectiveness of a cleanup project. An example of LTO is facility and building maintenance. LTO is equivalent to Remedial Action Operations (RA-O).
<b>National Contingency Plan (NCP)</b>	National Oil and Hazardous Substances Pollution Contingency Plan. The NCP effectuates the response powers and responsibilities created by CERCLA and the authorities of the Federal Water Pollution Control Act.
<b>National Environmental Policy Act (NEPA) Analysis</b>	An analysis conducted to evaluate an installation's disposal decisions in terms of their environmental impact. The NEPA analysis is useful to the community's planning efforts and the installation's property disposal decisions. It is used to support DoD decisions on transferring property for community reuse.
<b>National Priorities List (NPL)</b>	Formal list of the nation's worst hazardous waste sites, as established by CERCLA.
<b>No Further Action (NFA)</b>	Phrase applying to any site where the possibility of contamination no longer exists and where, therefore, no additional Remedial Action is required.
<b>No Further Response Action Planned (NFRAP)</b>	Phrase referring to sites at which no further site evaluation is warranted, according to EPA or the governing authority.

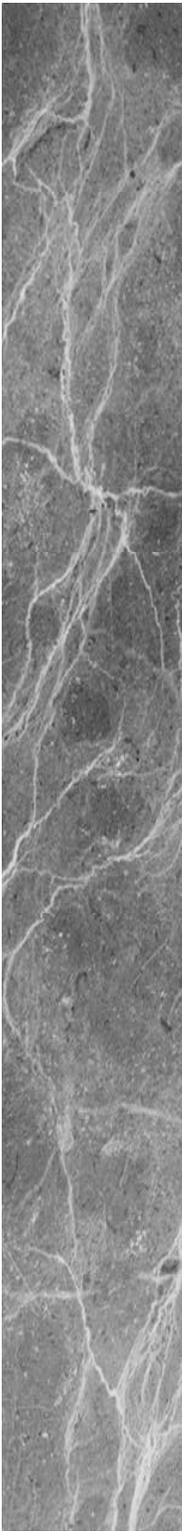


<b>Off-Base Contamination</b>	Contaminants found to be migrating off the installation or to be coming onto the installation from off-base sources.
<b>Operable Unit (OU)</b>	A grouping of sites for one of several reasons, such as use of the same response actions on approximately the same time schedule or geographic connection or similar characteristics, contaminants, or media.
<b>Preliminary Assessment (PA)</b>	The PA is a limited scope investigation designed to distinguish between sites that pose little or no threat to human health and the environment and sites that require further investigation. The PA typically is based on installation records searches, visual site inspections, and interviews of personnel. (The PA formerly was referred to as an Initial Assessment Study, or IAS.)
<b>RCRA</b>	See <i>Resource Conservation and Recovery Act (RCRA)</i> .
<b>RCRA Corrective Action</b>	RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984, establishes a comprehensive program for the management of hazardous wastes. HSWA provides authority for the investigation and cleanup of past waste sites, creating a corrective action program substantially equivalent to that under CERCLA.
<b>RCRA Facility Assessment (RFA)</b>	Initial RCRA process for determining whether corrective action is warranted for a RCRA past practice or for defining what additional data must be gathered to make this determination. Equivalent to a CERCLA Preliminary Assessment.
<b>RCRA Facility Investigation (RFI)</b>	RCRA process for determining the extent of hazardous waste contamination. Equivalent to a CERCLA Remedial Investigation.
<b>Record of Decision (ROD)</b>	The document containing the final decision and agreement among the installation, the state, and EPA concerning selection of the Remedial Action at a site or a group of sites.
<b>Remedial Action (RA)</b>	CERCLA phase in which the selected cleanup technology is constructed, installed, implemented, and/or operated until confirmatory sampling and analysis indicate that cleanup levels have been reached.





<b>Remedial Action Construction (RA-C)</b>	This phase is equivalent to the steps from the beginning of the Remedial Action through construction completion under CERCLA. It indicates that the necessary Remedial Action equipment has been put in place at the site.
<b>Remedial Action Operations (RA-O)</b>	This phase is equivalent to CERCLA's Long-Term Response Action (LTRA). It refers to the period when a remedy is being operated but cleanup goals have not yet been reached. Not all remedies require RA-O.
<b>Remedial Design (RD)</b>	CERCLA phase during which construction parameters and equipment specifications for a selected cleanup technology are defined on the basis of the unique characteristics of the site.
<b>Remedial Investigation (RI)</b>	CERCLA process for determining the extent of hazardous substance contamination and, as appropriate, for conducting Treatability Investigations. The RI provides site-specific information for the Feasibility Study.
<b>Remedial Project Manager (RPM)</b>	The person assigned to manage Remedial Actions or other response actions taken (or needed) at sites in the Installation Restoration Program (IRP). The RPM is responsible for coordinating, directing, and reviewing IRP work; ensuring compliance with the National Contingency Plan; and recommending action on decisions.
<b>Remedy in Place (RIP)</b>	Designation that a final Remedial Action has been constructed and implemented and is operating as planned in the Remedial Design. An example of a Remedy in Place is a pump-and-treat system that is installed, is operating as designed, and will continue to operate until cleanup levels have been attained. Because operation of the remedy is ongoing, the site cannot be considered Response Complete.
<b>Removal Action</b>	Part of the response process for, and often the first response to, an actual or threatened contaminant release. A Removal Action will employ any means necessary to abate, minimize, stabilize, mitigate, or eliminate the release or threat of release.

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- Resource Conservation and Recovery Act (RCRA)** The Resource Conservation and Recovery Act of 1976 revamped federal regulation of solid waste disposal and created a comprehensive federal regulatory program for hazardous waste control. RCRA amended the 1965 Solid Waste Disposal Act. It was reauthorized and expanded by the 1984 Hazardous and Solid Waste Amendments.
- Response Complete (RC)** Term indicating that the Installation Restoration Program (IRP) actions at a site or installation are deemed complete and that the site or installation is no longer a threat to public health or the environment. RC also can mean that the DoD Component is satisfied that IRP actions at a site are complete and that the proper authorities have been or are being notified, where necessary, of this determination.
- Restoration Advisory Board (RAB)** An advisory group for the environmental restoration process that includes members of the public, the installation, and regulatory agencies. The purpose of a RAB is to gain effective input from stakeholders on cleanup activities and to increase installation responsiveness to community environmental restoration concerns.
- Restoration Management Information System (RMIS)** A database designed to manage information about the Installation Restoration Program. By using this management tool, key personnel can track cleanup progress and expenditures throughout the restoration process for any site on any installation.
- Site Closeout (SCO)** Site Closeout is reached when no further Installation Restoration Program response actions are appropriate or anticipated and the regulatory agencies concur with this judgment. For National Priorities List (NPL) sites, this step will include following the proper procedures for deleting the site from the NPL. The date of actual Site Closeout is the date on which the deletion appears in the *Federal Register*.
- Site Inspection (SI)** A CERCLA process for acquiring the necessary data for confirming the existence of environmental contamination at identified potential sites and for assessing the associated potential risks to human health, human welfare, and the environment. The data collected at each site must be sufficient to support the decision to either continue with a Remedial Investigation and Feasibility Study or to remove the site from further investigation.



**Soil Vapor Extraction (SVE)**

A process that treats unsaturated soil contaminated with volatile organic compounds (VOCs). It induces the VOCs to flow through the soil to an extraction well by applying a vacuum device to the extraction wells, creating a pressure gradient that causes diffusion. The process includes a system for handling the gases. This technology is also known as in situ soil venting, in situ volatilization, enhanced volatilization, or soil vacuum extraction.

**Solid Waste Management Unit (SWMU)**

Any unit at a facility from which hazardous constituents might migrate, irrespective of whether the unit was intended for management of solid or hazardous waste. SWMU types include, but are not limited to, container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, injection wells, recycling operations, miscellaneous units, and releases from such units.

**Technical Assistance Grants (TAG)**

Specific allotments (of up to \$50,000 for a single recipient) that are made available by EPA to any group of individuals that may be affected by a release or threatened release at any installation that is listed on the National Priorities List under the National Contingency Plan. Such grants may be used to obtain technical assistance in interpreting information about the nature of the hazard, RI/FS, ROD, RD, selection and construction of the Remedial Action, operation and maintenance, or Removal Action at such an installation.

**Technical Review Committee (TRC)**

A group of technical individuals that is responsible for reviewing technical reports and data for a site. A TRC is established at all installations for the purpose of reviewing and commenting on actions and proposed actions concerning releases or threatened releases at the installation. The TRC consists of at least one representative from the installation and the cognizant Engineering Field Division, a representative of EPA, appropriate state and local authorities, and a public representative of the community involved.

**Underground Storage Tank Program**

The Underground Storage Tank (UST) Program was created by HSWA to regulate tanks that store both petroleum products and hazardous substances. RCRA Subtitle I establishes requirements for the management of USTs that contain petroleum products or any substance defined as hazardous under CERCLA. Investigation and cleanup of past contamination at UST sites are eligible for funding under the Environmental Restoration Program.

# Acronyms

AEC	
<b>AEC</b>	Army Environmental Center
<b>AFB</b>	Air Force Base
<b>AFBCA</b>	Air Force Base Conversion Agency
<b>AFCEE</b>	Air Force Center for Environmental Excellence
<b>AOC</b>	Area of Concern
<b>AR</b>	Administrative Record
<b>ARAR</b>	Applicable or Relevant and Appropriate Requirement
<b>ARTT</b>	Alternative Restoration Technology Team
<b>ASC</b>	Air Strategic Command
<b>AST</b>	Aboveground Storage Tank
<b>ATSDR</b>	Agency for Toxic Substances and Disease Registry
<b>BCP</b>	BRAC Cleanup Plan
<b>BCT</b>	BRAC Cleanup Team
<b>BEC</b>	BRAC Environmental Coordinator
<b>BES</b>	Budget Estimate Submissions
<b>BRAC</b>	Base Realignment and Closure
<b>BTEX</b>	Benzene, Toluene, Ethylbenzene, and Xylene (solvents)
<b>CA</b>	Cooperative Agreement; Corrective Action
<b>CAP</b>	Corrective Action Plan
<b>CAR</b>	Contamination Assessment Report
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act
<b>CERFA</b>	Community Environmental Response Facilitation Act

ECP	
<b>CMD</b>	Corrective Measures Design
<b>CMI</b>	Corrective Measures Implementation
<b>CMS</b>	Corrective Measures Study
<b>CRP</b>	Community Relations Plan
<b>CS</b>	Confirmation Study
<b>DDRE</b>	Defense Distribution Region East
<b>DDRW</b>	Defense Distribution Region West
<b>DDT</b>	Dichlorodiphenyltrichloroethane
<b>DERA</b>	Defense Environmental Restoration Account
<b>DERP</b>	Defense Environmental Restoration Program
<b>DETRF</b>	Defense Environmental Response Task Force
<b>DLA</b>	Defense Logistics Agency
<b>DNA</b>	Defense Nuclear Agency
<b>DNAPL</b>	Dense Nonaqueous Phase Liquid
<b>DoD</b>	Department of Defense
<b>DOE</b>	Department of Energy
<b>DON</b>	Department of Navy
<b>DPG</b>	Defense Planning Guidance
<b>DSERTS</b>	Defense Site Environmental Restoration Tracking System
<b>DSMOA</b>	Defense and State Memorandum of Agreement
<b>DSWA</b>	Defense Special Weapons Agency
<b>DUSD(ES)</b>	Deputy Under Secretary of Defense (Environmental Security)
<b>EA</b>	Environmental Assessment
<b>EBS</b>	Environmental Baseline Survey
<b>ECP</b>	Environmental Condition of Property

<b>EE/CA</b>	
<b>EE/CA</b>	Engineering Evaluation & Cost Analysis
<b>EFD/A</b>	Engineering Field Division/Activity
<b>EI</b>	Environmental Investigation
<b>EIS</b>	Environmental Impact Statement (NEPA)
<b>EPA</b>	U.S. Environmental Protection Agency
<b>ERA</b>	Ecological Risk Assessment
<b>ESD</b>	Explanation of Significant Differences
<b>ESI</b>	Expanded Site Inspection
<b>ESTCP</b>	Environmental Security Technology Certification Program
<b>FAA</b>	Federal Aviation Administration
<b>FFA</b>	Federal Facility Agreement
<b>FFID</b>	Federal Facility Identification Number
<b>FFS</b>	Focused Feasibility Study
<b>FOSL</b>	Finding of Suitability to Lease
<b>FOST</b>	Finding of Suitability to Transfer
<b>FS</b>	Feasibility Study
<b>FUDS</b>	Formerly Used Defense Sites
<b>FY</b>	Fiscal Year
<b>GAC</b>	Granular Activated Carbon
<b>GETS</b>	Groundwater Extraction and Treatment System
<b>GIS</b>	Geographic Information System
<b>GPR</b>	Ground-Penetrating Radar
<b>GPS</b>	Global Positioning System
<b>GWTP</b>	Groundwater Treatment Plant
<b>HRS</b>	Hazard Ranking System
<b>HSWA</b>	Hazardous and Solid Waste Amendments of
<b>IA</b>	Interim Action

<b>NCS</b>	
<b>IAG</b>	Interagency Agreement
<b>IAS</b>	Initial Assessment Study
<b>IR</b>	Installation Restoration
<b>IRA</b>	Interim Remedial Action
<b>IRP</b>	Installation Restoration Program
<b>ISC</b>	Initial Site Characterization
<b>IWTP</b>	Industrial Wastewater Treatment Program
<b>LAP</b>	Load-Assemble-Package
<b>LFI</b>	Limited Field Investigations
<b>LNAPL</b>	Light Non-aqueous Phase Liquid
<b>LRA</b>	Local Redevelopment Authority
<b>LRP</b>	Land Reuse Plan
<b>LTM</b>	Long-Term Monitoring
<b>LTO</b>	Long-Term Operations
<b>MCAS</b>	Marine Corps Air Station
<b>MCB</b>	Marine Corps Base
<b>MCL</b>	Maximum Contaminant Level
<b>MCLB</b>	Marine Corps Logistics Base
<b>MOA</b>	Memorandum of Agreement
<b>MOM</b>	Measures of Merit
<b>NAS</b>	Naval Air Station
<b>NASA</b>	National Aeronautics and Space Administration
<b>NAVFACEN</b>	Naval Facilities Engineering Command
<b>NAWC</b>	Naval Air Warfare Station
<b>NAWS</b>	Naval Air Weapons Station
<b>NCP</b>	National Oil and Hazardous Substances Pollution Contingency Plan
<b>NCS</b>	Naval Communication Station

<b>NELP</b>	
<b>NELP</b>	Navy Environmental Leadership Program
<b>NEPA</b>	National Environmental Policy Act
<b>NFA</b>	No Further Action
<b>NFRAP</b>	No Further Remedial Action Planned
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NPL</b>	National Priorities List
<b>NRC</b>	Nuclear Regulatory Commission
<b>NWIRP</b>	Naval Weapons Industrial Reserve Plant
<b>O&amp;M</b>	Operation and Maintenance
<b>OB/OD</b>	Open Burning/Open Detonation
<b>OECERT</b>	Ordnance & Explosives Cost Effectiveness Risk Tool
<b>OEW</b>	Ordnance and Explosives Waste
<b>OMB</b>	Office of Management and Budget
<b>OSD</b>	Office of the Secretary of Defense
<b>OU</b>	Operable Unit
<b>PA</b>	Preliminary Assessment
<b>PAH</b>	Polyaromatic Hydrocarbons
<b>PCB</b>	Polychlorinated Biphenyl
<b>PCE</b>	Tetrachloroethene
<b>PCP</b>	Pentachlorophenol
<b>POL</b>	Petroleum, Oil, and Lubricants
<b>POM</b>	Program Objective Memorandum
<b>PPBS</b>	Planning, Programming, and Budgeting System
<b>ppm</b>	Parts per Million
<b>PRAP</b>	Proposed Remedial Action Plan
<b>PRDA</b>	Program Research and Development Announcements

<b>SARA</b>	
<b>PRG</b>	Preliminary Remediation Goal
<b>PRP</b>	Potentially Responsible Party
<b>PSE</b>	Preliminary Source Evaluation
<b>QEA</b>	Qualitative Ecological Risk Assessment
<b>RA</b>	Remedial Action
<b>RA-C</b>	Remedial Action Construction
<b>RA-O</b>	Remedial Action Operations
<b>RAB</b>	Restoration Advisory Board
<b>RAC</b>	Removal Action Contract
<b>RAP</b>	Remedial Action Plan
<b>RBCA</b>	Risk-Based Corrective Action
<b>RC</b>	Response Complete
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RD</b>	Remedial Design
<b>RDX</b>	Cyclonite/Hexahydro-1,3,5-trinitro-1,3,4-triazine (an explosive)
<b>RFA</b>	RCRA Facility Assessment
<b>RFI</b>	RCRA Facility Investigation
<b>RI/FS</b>	Remedial Investigation/Feasibility Study
<b>RIP</b>	Remedy in Place
<b>RMIS</b>	Restoration Management Information System
<b>ROA</b>	Report of Availability
<b>ROD</b>	Record of Decision
<b>RPM</b>	Remedial Project Manager
<b>RSE</b>	Removal Site Evaluation
<b>SADBU</b>	Small and Disadvantaged Business Utilization
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986

<b>SBA</b>	
<b>SBA</b>	Small Business Administration
<b>SCAPS</b>	Site Characterization and Analysis Penetrometer System
<b>SCO</b>	Site Closeout
<b>SEAR</b>	Surfactant-Enhanced Aquifer Remediation
<b>SEBS</b>	Supplemental Environmental Baseline Survey
<b>SERDP</b>	Strategic Environmental Research and Development Program
<b>SI</b>	Site Inspection
<b>SSEBS</b>	Site-Specific Environmental Baseline Survey
<b>SSI</b>	Screening Site Inspection
<b>SVE</b>	Soil Vapor Extraction
<b>SWMU</b>	Solid Waste Management Unit
<b>TAG</b>	Technical Assistance Grant
<b>TAPP</b>	Technical Assistance for Public Participation
<b>TCA</b>	Trichloroethane

<b>VSI</b>	
<b>TCE</b>	Trichloroethene
<b>TCRA</b>	Time-Critical Removal Action
<b>TERC</b>	Total Environmental Restoration Contract
<b>TNT</b>	Trinitrotoluene
<b>TPH</b>	Total Petroleum Hydrocarbons
<b>TRC</b>	Technical Review Committee
<b>TS</b>	Treatability Study
<b>USACE</b>	U.S. Army Corps of Engineers
<b>USD(A&amp;T)</b>	Under Secretary of Defense (Acquisition and Technology)
<b>USFWS</b>	U.S. Fish and Wildlife Service
<b>USGS</b>	U.S. Geological Survey
<b>UST</b>	Underground Storage Tank
<b>UXO</b>	Unexploded Ordnance
<b>VOC</b>	Volatile Organic Compound
<b>VSI</b>	Visual Site Inspection

# Reporting Requirements Summary

## CERCLA §120(e)(5); 42 U.S.C. §9620(e)(5)

### Location in DERP Annual Report to Congress

*Each department, agency, or instrumentality responsible for compliance with this section shall furnish an annual report to Congress concerning its progress in implementing the requirements of this section. Such reports shall include, but shall not be limited to, the following:*

- A) A report on the progress in reaching interagency agreements under this section.
- B) The specific cost estimates and budgetary proposals involved in each interagency agreement.
- C) A brief summary of the public comments regarding each proposed interagency agreement.
- D) A description of the instances in which no agreement was reached.

Appendix C: Interagency Agreements, DSMOAs, and Cooperative Agreements

- E) A report on progress in conducting investigations and studies under paragraph (1).
- F) A report on progress in conducting remedial actions.
- G) A report on progress in conducting remedial actions at facilities that are not listed on the National Priorities List.

Appendix B: Program Status Tables

With respect to instances in which no agreement was reached within the required time period, the department, agency, or instrumentality filing the report under this paragraph shall include in such report an explanation of the reasons why no agreement was reached. The annual report required by this paragraph shall also contain a detailed description on a State-by-State basis of the status of each facility subject to this section, including a description of the hazard presented by each facility, plans and schedules for initiating and completing response action, enforcement status (where appropriate), and an explanation of any postponements or failure to complete response action. Such report shall also be submitted to the affected States.

Appendix A: Installation Narrative Summaries

Appendix B: Program Status Tables

Appendix C: Interagency Agreements, DSMOAs, and Cooperative Agreements

## National Defense Authorization Act §325(h) (Public Law 104-201)

*In the annual report required under section 2706(a) of title 10, United States Code, the Secretary shall include information on the land use plans developed under this section and the effect such plans have had on environmental restoration activities at defense sites where they have been implemented.*

The annual report submitted in 1999 shall include recommendations on whether such land use plans should be developed and implemented throughout the Department of Defense.

Appendix A: Installation Narrative Summaries (BRAC)

**SARA §211; 10 U.S.C. §2706****Location in DERP Annual Report to Congress***(a) Report on Environmental Restoration Activities.*

- 1) *The Secretary of Defense shall submit to the Congress each year, not later than 30 days after the date on which the President submits to the Congress the budget for a fiscal year, a report on the progress made by the Secretary in carrying out environmental restoration activities at military installations.*
- 2) *Each such report shall include, with respect to environmental restoration activities for each military installation, the following:*

- A) A statement of the number of sites at which a hazardous substance has been identified.
- B) A statement of the status of the response actions proposed for or initiated at the military installation.
- C) A statement of the total cost estimated for such response actions.
- D) A statement of the amount of funds obligated by the Secretary for such response actions, and the progress made in implementing the response actions during the fiscal year preceding the year in which the report is submitted, including an explanation of
  - i) any cost overruns for such response actions, if the amount of funds obligated for such response actions exceeds the estimated cost for those response actions by the greater of 15 percent of the estimated cost or \$10,000,000; and
  - ii) any deviation in the schedule (including a milestone schedule specified in an agreement, order, or mandate) for such response action of more than 180 days.
- E) A statement of the amount of funds allocated by the Secretary for, and the anticipated progress in implementing, such response actions during the fiscal year in which the report is submitted.
- F) A statement of the amount of funds requested for such response action for the five fiscal years following the fiscal year in which the report is submitted, and the anticipated progress in implementing such response actions for the fiscal year for which the budget is submitted.
- G) A statement of the total costs incurred for such response actions as of the date of submission of the report.
- H) A statement of the estimated cost of completing all environmental restoration activities at the military installation.
- I) A statement of the estimated schedule for completing all environmental restoration activities at the military installation.
- J) A statement of the activities, if any, including expenditures for administration and technical assistance under section 2705 of this title, of the technical review committee or restoration advisory board established for the installation under such section during the preceding fiscal year.

Appendix B: Program Status Tables

**SARA §211(d); 10 U.S.C. §2701(d) As Amended by the FY96 National Defense Authorization Act**

**Location in DERP Annual Report to Congress**

*The Secretary of Defense shall include in the report submitted to Congress, with respect to fiscal year 1998, under section 2706(a) of title 10, United States Code, information on the services, if any, obtained by the Secretary during FY96 pursuant to each agreement on a reimbursable basis entered into with a State or local government agency under section 2701(d) of title 10, United States Code, as amended by subsection (a).*

The information shall include a description of the services obtained under each agreement and the amount of the reimbursement provided by the services.

Appendix C: Interagency Agreements, DSMOAs, and Cooperative Agreements

**10 U.S.C. §2702(d) (Cooperative Agreements with an Agency of a State or Local Government to Obtain Assistance in Certifying Environmental Technologies)**

*In the annual report required under title 10, United States Code §2706(a), the Secretary shall include the following information with respect to cooperative agreements entered into under this section:*

- 1) The number of such agreements.
- 2) The number of states in which such agreements have been entered into.
- 3) A description of the nature of the technology involved in each such agreement.
- 4) The amount of funds obligated or expended by the DoD for each such agreement during the year covered by the report.

Appendix A: Installation Narrative Summaries

Appendix B: Program Status Tables

Appendix C: Interagency Agreements, DSMOAs, and Cooperative Agreements

### ATSDR Public Health Assessments of DoD Property

The Agency for Toxic Substances and Disease Registry (ATSDR), a branch of the U.S. Public Health Service, performs public health assessments at DoD NPL installations, in accordance with the agency's authority and responsibility under CERCLA. If additional information becomes available to ATSDR that changes the public health determination presented in the final release document, ATSDR issues an addendum. The following table summarizes the status of public health assessments at DoD NPL installations. In some cases, an installation has been divided into more than one area of assessment.

Stage of Assessment	Description	# of ATSDR Assessments					
		Army*	Navy**	Air Force	DLA	FUDS (DoD funded)	FUDS (CERCLA funded)
Initial Release Document	Provides DoD, state and federal regulatory agencies, and state and local public health departments with the opportunity to ensure that the most accurate and relevant information about the site is available to ATSDR.	23	13	12	1	3	20
Public Comment Release Document	Provides a formal mechanism through which the community and the public can provide additional comments and express their concerns, thereby furthering stakeholder involvement in the process.	22	12	10	3	3	19
Final Release Document	Incorporates the input of DoD, the regulatory agencies, public health departments, and the community. This document is the final independent public health assessment of the site by ATSDR.	17	11	7	3	3	19
All Stages, Total		62	36	29	7	9	58

\* Army Includes Civil Works

\*\* Navy Includes the Marine Corps

# Web Sites

WEB SITES	DESCRIPTION	INTERNET LOCATION
DoD BRAC/DERTF Home Page	BRAC information and publications, including the <i>DERTF Annual Report to Congress</i> and Meeting Minutes	<a href="http://www.dtic.mil/envirodod/envbrac.html">http://www.dtic.mil/envirodod/envbrac.html</a>
DERP Report to Congress	On-line copy of the 1994 through 1996 DERP Report to Congress	<a href="http://www.dtic.mil/envirodod/envdocs.html">http://www.dtic.mil/envirodod/envdocs.html</a>
Devolvement of the Defense Environmental Restoration Account	Report to Congress describing the benefits of disbursing funds to each service and providing answers to questions and congressional concerns	<a href="http://www.dtic.mil/envirodod/derpreport96/vol1/fact1.html">http://www.dtic.mil/envirodod/derpreport96/vol1/fact1.html</a>
DoD Environmental Cleanup Home Page	Web resource for up-to-date information on DoD's billion dollar cleanup program	<a href="http://www.dtic.mil/envirodod/index.html">http://www.dtic.mil/envirodod/index.html</a>
DoD Relative Risk Site Evaluation Primer	Provides information on the Relative Risk Site Evaluation framework being used by DoD and detailed instructions on conducting relative risk evaluations	<a href="http://www.dtic.mil/envirodod/relrisk/relrisk.html">http://www.dtic.mil/envirodod/relrisk/relrisk.html</a>
Office of the Deputy Under Secretary of Defense Environmental Security (DUSD(ES))	Home page for DUSD(ES), providing general information about the Office and its leaders, as well as links to other sites	<a href="http://www.acq.osd.mil/ens/">http://www.acq.osd.mil/ens/</a>
Proposed RAB Rule	DoD's 1996 proposed rule, which is awaiting finalization	<a href="http://www.dtic.mil/envirodod/rab/rab_fedr.html">http://www.dtic.mil/envirodod/rab/rab_fedr.html</a>
Final TAPP Rule	DoD's final rule on facilitating public participation in the DoD restoration program	<a href="http://www.dtic.mil/envirodod/rab/63fr_tapp.html">http://www.dtic.mil/envirodod/rab/63fr_tapp.html</a>
RAB Information Home Page	Provides list of publications and information about RABs	<a href="http://www.dtic.mil/envirodod/rab/">http://www.dtic.mil/envirodod/rab/</a>
RAB Resource Book	Provides a summary of DoD policy on various aspects of establishing and operating RABs and lists several other sources of information	<a href="http://www.dtic.mil/envirodod/rab/rabresource/">http://www.dtic.mil/envirodod/rab/rabresource/</a>

	WEB SITES	DESCRIPTION	INTERNET LOCATION
<b>Army</b>	Headquarters U.S. Army Corps of Engineers	Provides general information on all aspects of the USACE	<a href="http://www.usace.army.mil/">http://www.usace.army.mil/</a>
	Office of Director of Environmental Programs–Army	Includes the Army’s environmental mission and policy statement as well as recent Army news and links	<a href="http://www.hqda.army.mil/acsimweb/env/env1.htm">http://www.hqda.army.mil/acsimweb/env/env1.htm</a>
	U.S. Army Environmental Center	Provides general information on all aspects of the USAEC	<a href="http://aec-www.apgea.army.mil:8080/">http://aec-www.apgea.army.mil:8080/</a>
<b>Navy</b>	Department of Navy 5-Year Environmental Restoration Plan	A look at the Navy’s plan for identifying and assessing potential areas of environmental contamination from FY97 through FY01	<a href="http://5yrplan.nfesc.navy.mil/">http://5yrplan.nfesc.navy.mil/</a>
	Department of the Navy Environmental Program	Includes the Navy’s environmental mission and policy statement, as well as recent news and links to other Navy and environmental sites	<a href="http://enviro.navy.mil/">http://enviro.navy.mil/</a>
	NELP (Navy Environmental Leadership Program)	Provides information on the program and lists other resources, including recent publications	<a href="http://www.nasni.navy.mil/~nelp/nelp.htm">http://www.nasni.navy.mil/~nelp/nelp.htm</a>
	NFESC (Naval Facilities Engineering Service Center)	Provides general information about the center, its technical products, and its available services for assisting in technology transfer	<a href="http://www.nfesc.navy.mil/">http://www.nfesc.navy.mil/</a>
<b>USMC</b>	U.S. Marine Corps Environmental Program	Provides information on USMC environmental mission, programs, and news	<a href="http://www.hqmc.usmc.mil/enviro1/">http://www.hqmc.usmc.mil/enviro1/</a>
<b>Air Force</b>	Air Force Center for Environmental Excellence	Provides general information about the AFCEE and its products and services	<a href="http://www.afcee.brooks.af.mil/AFCEEfrm.htm">http://www.afcee.brooks.af.mil/AFCEEfrm.htm</a>
	Air Force Environmental Home Page	Includes the Air Force’s environmental mission and policy statement, as well as recent news and links	<a href="http://www.af.mil/environment/">http://www.af.mil/environment/</a>
	PRO-ACT	Air Force’s environmental information clearinghouse and research service	<a href="http://www.afcee.brooks.af.mil/pro-act">http://www.afcee.brooks.af.mil/pro-act</a>

	WEB SITES	DESCRIPTION	INTERNET LOCATION
<b>DLA</b>	DLA Environmental and Safety Policy Office (CAAE)	Provides information about the CAAE and links to DLA and other resources	<a href="http://www.caae.hq.dla.mil/">http://www.caae.hq.dla.mil/</a>
	Hazardous Technical Information Services (HTIS)	HTIS is a support function, operated by DLA, that provides consultation services to DoD personnel worldwide	<a href="http://www.dscr.dla.mil/htis/htis.htm">http://www.dscr.dla.mil/htis/htis.htm</a>
<b>FUDS</b>	FUDS	A USACE-sponsored site that describes FUDS projects	<a href="http://dogbert.ncr.usace.army.mil/military/derp/fuds/fuds.htm">http://dogbert.ncr.usace.army.mil/military/derp/fuds/fuds.htm</a>
<b>EPA</b>	EPA	EPA home page containing links to all regions and resources	<a href="http://www.epa.gov">http://www.epa.gov</a>
	EPA Office of Solid Waste	Provides information about RCRA and solid waste definitions and programs	<a href="http://www.epa.gov/epaoswer/osw/index.htm">http://www.epa.gov/epaoswer/osw/index.htm</a>
	Superfund	Information about the Superfund program and sites	<a href="http://www.epa.gov/superfund/">http://www.epa.gov/superfund/</a>
<b>Other</b>	AIR RISC Hotline	Information on health, exposure, and risk assessment of toxic air pollutants	<a href="http://www.epa.gov/earth100/records/a00119.html">http://www.epa.gov/earth100/records/a00119.html</a>
	Asbestos Ombudsman Clearinghouse	Information on asbestos abatement	<a href="http://www.icubed.com/epa_sbo/index.html">http://www.icubed.com/epa_sbo/index.html</a>
	DENIX (Defense Environmental Network & Information Exchange)	Provides DoD personnel in the environmental security arena with up-to-date information on environmental issues, legislation, and DoD guidance	<a href="http://denix.cecer.army.mil/denix/denix.html">http://denix.cecer.army.mil/denix/denix.html</a>
	DOIT (Develop On-site Innovative Technologies) Committee Report	Committee report containing committee findings on cooperative approaches to technical solutions	<a href="http://www.westgov.org/wga/publicat/doitweb.htm">http://www.westgov.org/wga/publicat/doitweb.htm</a>
	DSMOA	A guide to the DSMOA program and process	<a href="http://www.mrd.usace.army.mil/mrded-h/access/DSMOA/dsmoa.html">http://www.mrd.usace.army.mil/mrded-h/access/DSMOA/dsmoa.html</a>

	WEB SITES	DESCRIPTION	INTERNET LOCATION
<b>Other (continued)</b>	Emission Factor Clearinghouse	Air pollution emission factors for criteria and toxic pollutants from stationary and area sources, and from mobile sources	<a href="http://www.epa.gov/ttn/chief/">http://www.epa.gov/ttn/chief/</a>
	Environmental Security Technology Certification Program (ESTCP)	Provides general information, projects, and documents that describe the program	<a href="http://estcp.xservices.com/">http://estcp.xservices.com/</a>
	Hazardous Materials and Oil Spills Hotline	National Response Center in the event of hazardous material spills. Also provides reporting information	<a href="http://www.nrc.uscg.mil/index.html">http://www.nrc.uscg.mil/index.html</a>
	National Pesticide Telecommunications Network	Pesticide and pesticide-handling information	<a href="http://ace.ace.orst.edu/info/nptn">http://ace.ace.orst.edu/info/nptn</a>
	Partnering Guide for Environmental Missions of the Air Force, Army, and Navy (1996)	Publication on the partnering process, its benefits, and its application	<a href="http://www.hq.usace.army.mil/cemp/c/partner.htm">http://www.hq.usace.army.mil/cemp/c/partner.htm</a>
	Pollution Prevention Home Page	Pollution prevention guidance and documents	<a href="http://www.epa.gov/opptintr/p2home">http://www.epa.gov/opptintr/p2home</a>
	RCRA/Superfund/Underground Storage Tank Hotline	Information on RCRA, Superfund, UST, SPCC, EPCRA, Oil Pollution Act (OPA), RMP, and pollution prevention	<a href="http://www.epa.gov/epaoswer/hotline">http://www.epa.gov/epaoswer/hotline</a>
	Safe Drinking Water Hotline	Safe Drinking Water Act and amendments, information on policy and regulations regarding public water supply programs	<a href="http://www.epa.gov/ogwdw">http://www.epa.gov/ogwdw</a>
	Watershed Information Resource System	Information on lake restoration, management, and protection	<a href="http://www.terrene.org/index.htm">http://www.terrene.org/index.htm</a>
	Wetlands Protection	Information on the value and function of wetlands	<a href="http://www.epa.gov/owow/wetlands/">http://www.epa.gov/owow/wetlands/</a>

# Whom To Contact

*For additional general information about the Defense Environmental Restoration Program and information about specific initiatives, write to:*

**Office of the Assistant Deputy Under Secretary of Defense  
(Environmental Security/Cleanup)**  
3400 Defense Pentagon  
Washington, DC 20301-3400

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*For additional information about the activities of specific DoD components, write to:*

**Department of the Army\***  
Office of the Deputy Assistant Secretary of the Army  
for Environment, Safety, and Occupational Health  
110 Army Pentagon  
Washington, DC 20310-0110

**Department of the Navy\*\***  
Office of the Deputy Assistant Secretary of the Navy  
1000 Navy Pentagon  
Washington, DC 20350-1000

**Defense Special Weapons Agency**  
6801 Telegraph Road  
Alexandria, VA 22310-3398

\*Includes FUDS

\*\*Includes Marine Corps

**Department of the Air Force**  
Office of the Deputy Assistant Secretary of the Air Force  
for Environment, Safety, and Occupational Health  
1660 Air Force Pentagon  
Washington, DC 20330-1660

**Defense Logistics Agency**  
Environmental and Safety Policy Office  
8725 John J. Kingman Road  
Suite 2553  
Fort Belvoir, VA 22060-6221

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*For information on small business, write to:*

**OSD Small and Disadvantaged Business Utilization Office**  
3061 Defense Pentagon  
Washington, DC 20301-3061

**Army Small Business Office**  
Attn: SADB  
106 Army Pentagon  
Room 2A712  
Washington, DC 20301-0106

**Navy Small and Disadvantaged Business Utilization Office**  
2211 Jefferson Davis Highway  
Arlington, VA 22244-5102

**Army Corps of Engineers Small Business Office**  
20 Massachusetts Avenue, NW, #4117  
Washington, DC 20014-1000

**Air Force Small Business Office**  
SAF/CB  
1060 Air Force Pentagon  
Washington, DC 20330-1060

