

**TABLE 6-1: ALAMEDA POINT SITE/AREAS DESCRIPTION**

Community Involvement Plan Update, Alameda Point, Alameda, California

IR Site Number/ Operable Unit	Site Name	Historic Use	Current Contaminants of Interest	Current CERCLA Status	Planned Future Reuse	Work Performed
IR Site 1 (OU-3)	1943 – 1956 Disposal Area	Principal waste disposal area for all waste generated at NAS Alameda between the years 1943 to 1965, including old aircraft engines, cables, scrap metal, waste oil, paint waste, solvents, cleaning compounds, construction debris, incinerator ash, and low-level radiological waste.	<b>Soil:</b> PAHs, pesticides, PCBs, metals, RAD <b>Groundwater:</b> Vinyl Chloride <b>Surface Water:</b> VOCs, SVOCs, arsenic	Final ROD signed November 2009. Final TCRA Completion Report submitted August 2009. Pre-Design field work to begin in Winter 2010.	Recreational	TCRA to address radiological contamination and MPPEH conducted from 2006 to 2008. 790 cubic yards of radiologically contaminated soil and 105 discrete radiological items were removed from IR Site 1 and disposed of offsite. Former Firing-Range Berm and Debris Pit containing 54,503 MPPEH items or 11,500 lbs of MPPEH was also removed.
IR Site 2 (OU-4A)	West Beach Landfill and Wetlands	Constructed as a landfill for NAS Alameda and used from 1950's through 1978	<b>Soil:</b> Benzo(a)pyrene, PCBs, metals, pesticides, RAD <b>Surface Water:</b> Metals, Pesticides, PCBs, SVOCs, PAHs	Final TCRA Completion Report submitted August 2009. PP finalized August 2009. Draft ROD submitted January 2010.	Recreational	TCRA to address radiological contamination conducted from 2006 to 2008. 48 cubic yards of radiologically contaminated soil and 11 discrete radiological items were removed from IR Site 2 and disposed of offsite.
IR Site 3 (OU-2B)	Abandoned Fuel Storage Area	Site of five aviation fuel storage tanks. Tanks cleaned and closed in place in 1987	<b>Soil:</b> TPH, lead <b>Groundwater:</b> TPH, lead	Revised Draft OU-2B FS anticipated March 2010.	Residential and commercial/ industrial	DVE system in operation since 2007 to remove TPH. Successfully removed 115,000 pounds (lb.) of TPH at CAA 3; 4,000 lb removed at CAA 6; and 9,000 lb. removed at CAA 7.
IR Site 4 (OU-2B)	Building 360, Aircraft Engine Facility	Aircraft engine and airframe overhaul facility	<b>Soil:</b> lead, cadmium, PCBs, pesticides <b>Groundwater:</b> Chlorinated VOCs (TCE, TCA, DCE, DCA, VC), metals	Revised Draft OU-2B FS anticipated March 2010.	Residential and commercial or light industrial	1) January 2009: Removal of OWS 163 adjacent to Building 163. Approximately 47 cubic yards of soil removed from excavation. 2) A DNAPL source removal action utilizing three-phase heating occurred from 2006 to 2007 at Bldg 360. Removed approximately 2,000 lbs of total VOCs within IR Site 4. Reduced average total VOC groundwater concentrations in Plume 4-2 from 56,000 ppb to 1,600 ppb.

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IR Site 5 (OU-2C)	Building 5, Aircraft Rework Facility	Aircraft component repair and maintenance	<b>Soil:</b> VOCs, Metals, RAD <b>Groundwater:</b> VOCs	Final FS scheduled for 2010. Radiological TCRA for storm/sewer lines is in progress. DNAPL source NTCRA completed in February 2009. Final NTCRA Completion Report submitted February 2010.	Commercial/ Industrial	1) A DNAPL source removal action utilizing six-phase heating occurred from 2005 to 2009. Removed approximately 3,250 lbs of total VOCs within IR Site 5. Reduced average total VOC groundwater concentrations in Plume 5-1 from 54,000 ppb to 120 ppb and in Plume 5-3 from 82,000 ppb to <300 ppb. 2) TCRA for storm/sewer lines with RAD currently being conducted; for IR Sites 5 and 10, over 10,000 feet of piping removed and 25,000 cubic yards of soil removed through January 2010.
IR Site 6 (OU-1)	Building 41, Aircraft Intermediate Maintenance Facility	Seaplane Hangar and aircraft maintenance facility	<b>Groundwater:</b> VOCs	Final RD/RAWP submitted February 2010. Remedial action being conducted.	Commercial/ industrial	1) DVE system and free product removal system operated between 2002 and 2004. In 2004, remaining piping and 1,100 tons of soil were removed. 2) Removed Oil Water Separator (OWS) 040A and excavated 4 cubic yards of soil.
IR Site 7 (OU-1)	Navy Exchange Service Station	Most recently used as automotive repair and servicing facility; before that, the site of a gas station and previously an incinerator	<b>Soil:</b> PAHs, metals	Final RD/RAWP submitted February 2010. Remedial action being conducted.	Residential	Excavated 3,000 cubic yards of soil and removed OWS 459.

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IR Site 8 (OU-1)	Building 114, Pesticide Storage Area	Building 191 used as storage for Public Works Dept. Building 391 used to store paints, degreasers, pesticides, petroleum products, and hazardous waste	<b>Soil:</b> lead, PCBs, pesticides	Final RD/RAWP submitted February 2010. Remedial action being conducted.	Residential	5 cubic yards of soil excavated
IR Site 9 (OU-2A)	Building 410, Paint Stripping Facility	Corrosion Control Facility - paint stripping and aircraft cleaning	<b>Groundwater:</b> VOCs, TPH	Revised OU-2A Draft FS submitted December 2009. Final expected 2010.	Combination of business park/light industrial, open space, and civic/institutional support	<ol style="list-style-type: none"> <li>1) 2002 ISCO pilot test</li> <li>2) 2006 full scale ISCO on Site 9, shallow aquifer using Fenton's Reagent modified with chelated iron: average 70% reduction (DCE) and 73% reduction (VC) in wells with baseline concentrations greater than the MCL. VC was reduced to non-detect in a majority of wells with MCL exceedances.</li> <li>3) 2006 full scale ISCO on Site 9, intermediate Aquifer using Fenton's Reagent modified with chelated iron: Average 41% reduction of DCA, and 33% reduction of VC.</li> </ol>
IR Site 10 (OU-2C)	Building 400, Missile Rework Operations	Location used to repair and refurbish missile control systems and avionics.	<b>Soil:</b> RAD	Radiological TCRA for storm/sewer lines originating in Building 400 to be completed in 2010. RAD impacted storm drains within Building 400 will be addressed in Final OU-2C FS scheduled for 2010).	Commercial/Industrial	TCRA for storm/sewer lines with RAD currently being conducted; for IR Sites 5 and 10, over 10,000 feet of piping removed and 25,000 cubic yards of soil removed through January 2010.

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IR Site Number/ Operable Unit	Site Name	Historic Use	Current Contaminants of Interest	Current CERCLA Status	Planned Future Reuse	Work Performed
IR Site 11 (OU-2B)	Building 14, Engine Test Cell	Aircraft and engine test facility including aircraft repair	<b>Groundwater:</b> VOCs	Revised OU-2B Draft FS submitted December 2009. Final expected 2010.	Residential and commercial or light industrial	—
IR Site 12 (OU-2C)	Building 10, Power Plant	From the late 1930s to the early 1970s, Building 10 was used as the power plant that generated steam and compressed air.	None	Final RI report recommended no further action for IR Site 12 soil and groundwater.	Commercial/Industrial	—
IR Site 13 (OU-2A)	Former Oil Refinery	Former site of historical oil refinery. Also includes building used for jet engine test cells.	<b>Soil:</b> PAHs <b>Groundwater:</b> VOCs, SVOCs related to Tarry Refinery Waste	Revised Draft OU-2A FS submitted December 2009. Final expected in 2010.	Business park/light industrial, open space, and civic/institutional support	(1) In 1993, 1,310 tons of soil was removed in response to a clean-up action for a JP-5 spill near Building 397. (2) Dual-vapor extraction (DVE) pilot test conducted in 2001, removed 1,148 lbs of TPH.
IR Site 14 (OU-1)	Former Fire Fighter Training Area	Maintenance facilities and fire-fighter training area	<b>Groundwater:</b> VC	RD/RAWP submitted December 2008.	Recreational	The application of ISCO utilizing the recirculation approach appears to have reduced the concentrations of VC in groundwater. The average concentration decreased from an average of 44 µg/L to about 13 µg/L (maximum concentration from 380 µg/L to about 39 µg/L). Additional groundwater monitoring is being performed to evaluate changes in VOC concentrations due to rebound and/or continued reductions through natural attenuation processes.

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IR Site Number/ Operable Unit	Site Name	Historic Use	Current Contaminants of Interest	Current CERCLA Status	Planned Future Reuse	Work Performed
IR Site 15 (OU-1)	Former Transformer Storage Area	Maintenance facilities used to decommission electrical transformers	None	NFA ROD signed June 2006.	Recreational (Portions of IR 15 are included in PBC-1 which was transferred to the ARRA in 2009)	—
IR Site 16 (OU-1)	Shipping Storage Container Area Auto Hobby Shop	Auto shop, storage sheds	<b>Soil:</b> Lead, pesticides <b>Groundwater:</b> VOC	Final RD/RAWP submitted February 2010. Remedial action being conducted.	Commercial/industrial	Removed OWS 608A and excavated 120 cubic yards of soil.
IR Site 17 (OU-4B)	Seaplane Lagoon	Ship and seaplane mooring	<b>Sediments:</b> Total PCBs, DDx, cadmium, lead, and chromium in sediment	RD finalized July 2008. RAWP to be finalized May 2010. Final TCRA Completion Report to be submitted in June 2010.	Commercial marina surrounded by a mixed-use marina-related district	TCRA completed to remove debris piles on northern bank of Seaplane Lagoon; removed ~50,000 tons of soil and debris (mostly Cal-hazardous waste due to metals) since September 2008.
IR Site 18	Storm Sewers	N/A	N/A	No longer a site; storm sewers grouped with other IR Sites.	N/A	—
IR Site 19 (OU-2A)	Yard D-13, Hazardous Waste Storage	Permitted hazardous waste storage area	None	Revised Draft OU-2A FS submitted December 2009. Final expected in 2010.	Combination of business park/light industrial, open space, and civic/institutional support	—

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IR Site 20 (OU-4C)	Oakland Inner Harbor	Oakland Inner Harbor Channel is a major industrial waterway serving marine terminals and repair facilities in the Cities of Oakland and Alameda. The shoreline of IR 20 extends approx. 3,960 feet. There are four storm sewer outfalls along the IR 20 shoreline.	None	Final ROD for no further action at IR Site 20 signed in October 2008.	Water taxi/ferry stop	Storm sewer lines removed and replaced and/or cleaned in 1990s.
R Site 21 (OU-2B)	Building 162, Ship Fitting and Engine Repair	Ship and aircraft maintenance	<b>Soil:</b> Metals <b>Groundwater:</b> VOCs	Revised Draft OU-2B FS anticipated March 2010.	Residential and commercial or light industrial	—
IR Site 22 (OU-2A)	Building 547, Former Service Station	Formerly a gasoline distribution and service station, with 3 USTs	<b>Soil:</b> Lead, benzene related to petroleum <b>Groundwater:</b> Petroleum	Revised Draft OU-2A FS submitted December 2009. Final expected in 2010.	Combination of business park/light industrial, open space, and civic/institutional support	—
IR Site 23 (OU-2A)	Building 530, Missile Rework Operations	Missile control systems repair and refurbishment	<b>Soil:</b> Metals	Revised Draft OU-2A FS submitted December 2009. Final expected in 2010.	Combination of business park/light industrial, open space, and civic/institutional support	—

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IR Site 24 (OU-4B)	Pier Area	Ship Berthing	<b>Sediments:</b> PCBs and certain pesticides and metals	Proposed Plan issued in May 2009 recommended cleanup for northeastern corner of IR Site 24 and no action for the remainder of the site. Record of Decision expected in 2010	Commercial marina	Storm sewer lines removed and replaced and/or cleaned in 1990s.
IR Site 25 Soil	Estuary Park and Coast Guard Housing Area	Used historically for military housing	<b>Soil:</b> PAH	Final ROD for soil signed October 2007. RD for soil LUC issued September 2009.	Residential	TCRA for Clover Park Playground completed in 2000; TCRA for North Housing and Estuary Park completed in 2002; over 66,700 cubic yards of PAH-contaminated soil removed.
OU-5/ FISCA IR Site 2 Groundwater	IR Sites 25, 30, 31, FISCA IR 2	Used historically for military housing	<b>Groundwater:</b> Benzene and naphthalene plume	Final ROD for groundwater issued September 2007. Remediation construction completed October 2009.	Residential and/or educational	Groundwater treatment for benzene and naphthalene plume is in progress.
IR Site 26 (OU-6)	Western Hangar Zone	Four former aircraft hangars and aircraft washdown areas. Has AST, UST, OWS, and fuel lines.	<b>Groundwater:</b> DCE, TCE, VC	Final RD/RAWP submitted October 2008.	Mixed-use area (industrial, residential, commercial, and open space)	Ongoing groundwater remediation from July 2008 to present; reduced chlorinated VOC concentrations significantly (an estimated 87%, 57%, and 89% reduction of DCE, TCE, and VC, respectively) after two full-scale chemical oxidation treatments. Additional treatment, which may include in situ bioremediation, is planned to further reduce chlorinated VOC concentrations.

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IR Site Number/ Operable Unit	Site Name	Historic Use	Current Contaminants of Interest	Current CERCLA Status	Planned Future Reuse	Work Performed
IR Site 27 (OU-6)	Dock Zone	historically used for ship docking, repair, and staging, and storing painting equipment and materials; vehicle washdown; and chemical storage and handling	<b>Groundwater:</b> VOCs	Final RD/RAWP submitted June 2009.  July 2009 - began Remedial Action.	Residential, recreational, light industrial and commercial	—
IR Site 28 (OU-6)	Todd Shipyards	Property used by Todd Shipyards for ship repair	<b>Soil:</b> PAHs, arsenic, and lead <b>Groundwater:</b> Copper	Final RD/RAWP expected March 2010.	Recreational	Pilot test in 2009 removed 19 cubic yards of soil and treated 21,000 gallons of groundwater by use of an innovative technology (MRC) for immobilizing metals.
IR Site 29 (OU-4C)	Skeet Range	Had 2 shooting ranges (Northern and Southern) actively used for 30 to 40 years until they were closed in 1993. Lead shot was discharged from guns toward clay pigeon targets projected westerly over San Francisco Bay	None	Final NFA ROD signed September 2005.	Recreational and open space	—
IR Site 30 Soil	Woodstock Child Development Center and Island High School	Formerly used for military housing, storage, parking, and for residential and educational purposes	<b>Soil:</b> N/A	Final ROD for soil September 2009; NFA selected.	Educational for public benefit	<b>Soil:</b> TCRA in November 2004 to remove 50 cubic feet of shallow soil and addition of soil cover materials.
IR Site 31 Soil	Marina Village Housing	Served as a private airfield, military housing, warehouses, and storage.	<b>Soil:</b> N/A	Final ROD for no action for soil signed October 2008.	Residential	—

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IR Site 32 (no OU)	Northwest Ordnance Storage Area	Storage for diesel fuel and gasoline; runways and bunker. New boundary includes some portion of property formerly included in IR Site 1.	<b>Soil:</b> Radionuclides (Ra-226) <b>Groundwater:</b> VOCs (VC, TCE, Chlorobenzene)	Revised draft RI/FS expected December 2009 to address additional radiological contamination found in soil.	Recreational	TCRA to address RAD contamination conducted from 2006 to 2008. 222 cubic yards of radiological contaminated soil and 37 discrete radiological items were removed from IR Site 32 and disposed of offsite.
IR Site 33 (no OU)	South Tarmac and Runway Wetlands	Used as tarmac, former runway, and wetlands area	<b>Soil:</b> PAHs (in tarmac/runway portion only)	Draft SI submitted May 2008. Draft Expanded SI WP submitted November 2009.	Wetland/open space; located in close proximity to least tern sanctuary	—
IR Site 34 (no OU)	Former Northwest Shop Area	Maintenance shops	<b>Soil:</b> VOCs, PAHs, PCBs, pesticides, TPH, metals	Draft Final FS submitted February 2010.	Recreational	—
IR Site 35 (no OU)	West Housing Area	Residential, office space, pesticide use, chemical storage, fuel storage, and hazardous material storage	<b>Soil:</b> heptachlor, lead, and TPH	Draft RD/RAWP expected May 2010. RA expected to begin November 2010.	Mixed-use area (industrial, residential, commercial, and open space)	<ol style="list-style-type: none"> <li>1) TCRA for storm sewer sediment removal between 1995 and 1997 removed 194,000 linear feet of storm drain lines.</li> <li>2) Previous PAH removal action: 7,600 tons of PAH-impacted soil removed in 2003.</li> <li>3) Previous lead removal action: 1,620 cubic yards of lead-impacted soil were removed in 2002 to 2003. Pesticide/fertilizer storage shed (Building 195) and 203 cubic yards of soil was removed in 2004.</li> </ol>

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**Glossary:**

ARRA	Alameda Reuse and Redevelopment Authority	OU	Operable Unit
AST	Aboveground storage tank	OWS	Oil/Water separator
CAA	Corrective action area	PAH	Polycyclic aromatic hydrocarbon
COC	Contaminant of Concern	PBC	Public benefit conveyance
DCA	Dichloroacetylene	PCB	Polychlorinated biphenyl
DCE	Dichloroethene	PCE	Tetrachloroethene
DDT	Dichlorodiphenyltrichloroethane	PP	Proposed Plan
DDx	Breakdown products of DDT	Ppb	Parts per billion
DNAPL	Dense nonaqueous phase liquid	RD/RAWP	Remedial Design/Remedial Action Work Plan
DVE	Dual phase vapor extraction	ROD	Record of Decision
FISCA	Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex	SI	Site Inspection
FS	Feasibility Study	SVOC	Semi-volatile organic compounds
HHRA	Human health risk assessment	TCA	Trichloroethane
IR	Installation Restoration	TCE	Trichloroethene
ISCO	In situ chemical oxidation	TCRA	Time-critical removal action
LUC	Land Use Control	TPH	Total petroleum hydrocarbons
MCL	Maximum contaminant level	UST	Underground storage tank
MPPEH	Material potentially presenting an explosive hazard	VC	Vinyl chloride
MRC	Metals Remediation Compound	VOC	Volatile organic compounds
NFA	No further action	WP	Work plan