

Benicia Requests

Timestamp 2/11/2010 19:37:45	DC contact phone number n/a
Project Name Benicia Arsenal Investigation and Cleanup	DC contact email address n/a
California contact name Heather C. Mc Laughlin	Intended Recipient/Grantee City of Benicia
California contact phone number 707-746-4216	Recipient's tax status Public agency
California contact email address hmclaughlin@ci.benicia.ca.us	Recipient's Location (City, State) Benicia, CA
California contact name -- for press inquiries Heather C. Mc Laughlin	Project Location (City, State) Benicia, CA
California contact phone number -- for press inquiries 707-746-4216	Subcommittee Interior and Environment
California contact email address -- for press inquiries hmclaughlin@ci.benicia.ca.us	Federal Agency Army Corps of Engineers
Amount of FY2011 President's Budget Request 0	Appropriations account name ?
FY2010 Federal funding level 0	Amount of funding request 38,000,000
FY2009 Federal funding level 0	Non-Federal Cost Share 3,000,000
FY2008 Federal funding level 0	Source of Non-Federal Cost Share All of the above
	Total Cost of Project 41,000,000
	Priority of Project 1

Project Description (one paragraph)

Money will be used to finish the investigation of munition and chemical contamination resulting from the former military use of the Benicia Arsenal. Money will also be used to assist in the remediation of the Arsenal. Approximately 30 jobs will be created. Additional information (City Council resolution and letter) will be submitted by email.

Purpose of Project (one sentence)

With the investigation and clean up of the former Benicia Arsenal, development of the Arsenal can occur in an economically and environmentally beneficial manner.

Statutory Authorization for Requested Project

Under the Formerly Used Defense Sites ("FUDS") program, investigation and cleanup of the Benicia Arsenal began. In conducting FUDS cleanups, the Corps is required to comply with the National Contingency Plan (NCP), established under CERCLA, and also to ensure that cleanup complies with all Applicable or Relevant and Appropriate Requirements. Thus, the Department of Defense has the responsibility to protect the public from potential hazards associated with the former Benicia Arsenal. Prior studies indicate that chemical and munitions remain from years of military use. While the Department of Defense has the responsibility to conduct response actions at FUDS subject to and consistent with CERCLA at FUDS, DoD focuses its efforts under DERP only on releases associated with DoD activities. EPA, however, has broader CERCLA response authorities at privately-owned FUDS and is charged with ensuring that known or threatened releases of hazardous substances, pollutants or contaminants, regardless of source, are responded to in accordance with CERCLA. EPA may perform response activities at privately-owned sites, including FUDS. The former Benicia Arsenal is an ideal FUDS for cleanup actions since it is located in a suburban area with the potential for the public to be exposed to pollutants or contaminants.

DRAFT
Areas Requiring Further Investigation and Remediation
Cost Estimate

Ordnance Investigation/Cleanup

Area	Description of Further Work	Estimated Cost
Rail Spur D and kickout radius	Identify area of concern, perform surface clearance and clearance to depth	\$700,000
Areas North and East of Tourtelot North Valley	Clearance to depth	\$350,000
Off-shore areas at port	Clearance to find lost MEC Items	\$350,000
Complete Camel Barn clearance	Clearance to depth of propose uses	\$385,000
Historical ordnance storage bunkers and kickout radius and OS25 and OS25A	Surface clearance and clearance to depth	\$315,000
Burn disposal area between bunkers A211 and A215	Surface clearance and clearance to depth	\$175,000
Site 4 Valero Demo Area, Area 13?	Complete clearance to depth on east side of EDOT investigation area	\$175,000
Site	Plans and Corps Docs	\$1,000,000
		\$3,450,000
	Low End Range (-30%)	\$2,415,000.0
	High End Range (+50%)	\$5,175,000.0

HTRW Investigation and Cleanup

		Investigation	Remediation	Estimated Total Cost	Comments
Fill Site 1	Additional GW sampling and Testing (new wells) to define source and extent of TCE	\$70,000	\$241,000	\$311,000	Capping All Landfill Sites
Fill Site 2	Complete investigation of pb and benzo a pyrene	\$48,000	\$241,000	\$289,000	Same site area as Fill Site 1
Post Dump	Complete further investigation of Post Dump for TCE, diesel, and pesticides in soil and GW	\$124,000	\$1,686,000	\$1,810,000	
Storm drain and sewer piping systems	Investigate using borings to assess potential impacts from leakage, solvents degreasers	\$1,100,000	\$3,000,000	\$4,100,000	Lining only
Investigate buildings not investigated in Area 1	Phase 2 work on building areas identified in Work Plan	\$676,000	\$0	\$676,000	
AFV	Additional sampling down gradient of AFV	\$44,000	\$150,000	\$194,000	
Marsh Area	Investigate former marsh areas west of 50 Series buildings for industrial waste	\$160,000	\$0	\$160,000	
So. Of 50 Series Bldgs	Investigate for pb contamination	\$64,000	\$0	\$64,000	
Former burn site	Investigate no borings located here	\$60,000	\$200,000	\$260,000	
Salvage Yard	Need borings in salvage yard	\$48,000	\$0	\$48,000	
CL1 Highland Area	Define TCE extent and source, test for explosives, test actual location	\$98,000		\$98,000	Remove Leather wastes and impacted soil, remediate TCE
Spurs A and G	Sample for contaminates	\$76,000	\$100,000	\$176,000	
Spur E	Test for explosives and	\$16,000	\$100,000	\$116,000	
Burn cages	Test for metals and TP	\$32,000	\$100,000	\$132,000	
Target burn area	Need groundwater san	\$28,000	\$200,000	\$228,000	
Area W Waste areas (2)	Sampling for Cr	\$32,000	\$715,000	\$747,000	

CL2 Area	Test actual building location, geophysical survey for ust	\$18,000	\$40,000	\$58,000
CL 1 Area Septic 194	Test actual location	\$8,000	\$0	\$8,000
Area M	investigation for metals and pesticides	\$120,000	\$0	\$120,000
Fill Site 3	Test for metals	\$24,000	\$0	\$24,000
Building 31	Risk Assessment recommended		\$0	\$0 See Line 84
Buildings 27, 45, CL2, 161, 154?	Remove USTs	\$70,000	\$200,000	\$270,000
Post Dump Site	Additional borings needed in northern 1/3 and perimeter borings	\$32,000	\$0	\$32,000
Building 165	Risk Assessment recommended			\$0
Building 120	Risk Assessment recommended		\$0	\$0 See Line 84
	Reassess sampling program more sampling needed	\$40,000	\$0	\$40,000
Building 118A, AST	Risk Assessment recommended to address fuels		\$0	\$0 See Line 84
Building 103	Risk Assessment recommended for fuel impacted soil and GW		\$0	\$0 See Line 84
Building 101	More sampling needed, greater depth, test for lead, at effluent discharge (included in marsh testing), at septic tank,	\$32,000	\$0	\$32,000
Building 93	Risk Assessment recommended TCE in soil gas		\$0	\$0 See Line 84
All buildings /former buildings	Lead based paint	\$320,000	\$556,000	\$876,000
Building 91	Needs testing for solvents	\$28,000	\$0	\$28,000

Building 90	Risk Assessment recommended for solvents		\$0	\$0	See Line 84
Building 59A	Risk Assessment recommended to address fuels		\$0	\$0	See Line 84
Building 59	Risk Assessment recommended to address fuels		\$0	\$0	See Line 84
Building 65A/58A	Risk Assessment recommended to address fuels, MO, Further definition of Pb in soil		\$0	\$0	See Line 84
Buildings 55,56,56A,57 plus 50 Series Buildings Area	Investigation and remediation of TCE, fuels and MO	\$1,200,000	\$10,000,000	\$11,200,000	
Building 53	Risk Assessment recommended to address fuels, and lead impacted soil		\$0	\$0	See Line 84
Building 51	Additional investigation lead, PAHs	\$32,000	\$0	\$32,000	
Building 42/93	TPH in soil	\$32,000	\$0	\$32,000	
Building 31	Risk Assessment recommended, VOC TPH		\$0	\$0	See Line 84
Risk Assessments all Buildings		\$300,000		\$300,000	
Investigation of Miscellaneous Buildings	Investigations	\$450,000		\$450,000	
Remediation of Miscellaneous Buildings	Remediation		\$1,000,000	\$1,000,000	
	HTRW	\$4,932,000	\$18,529,000	\$23,911,000	
	MEC		\$3,450,000	\$3,450,000	
	Total			\$27,361,000	
	Estimated Total Range		\$19,153,000	\$41,042,000	