

M

PA Summary

DoD Site #

1

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD			
Year Bldg. Built	1856	Year Bldg. Removed	Not applicable	Site Area (SqFt)	4083
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Hospital, Laundry, and Temporary Buildings

DoD Uses

Hospital

Secondary DoD Uses

Unknown

Post-Army Uses

1973: leased to Nelson Neon as office space and for the repair and fabrication of electrical signs (ref 425). Currently serves as an office for Benicia Industries, Inc.

Flooring

Building constructed of sandstone

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

In 1877, several rooms were added to the rear of the building and a second story was constructed. The building was used as an officers' club in 1924 and is listed as a chapel on a 1945 map (ref 650).

Records Research Report Comments

The Post Hospital, Building 1, located approximately 1000 feet northwest of Pine Lake. Originally part of the Benicia Barracks and is the only remaining Barracks building. Constructed of sandstone. It consisted of a front room with a ward on either side of a central hallway leading back to a kitchen, mess room, office, and store. This structure has been designated as a National Historic Landmark Building under federal preservation programs.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

2

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	1855	Year Bldg. Removed	Not applicable	Site Area (SqFt)	3713
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Powder Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

General Storage (furniture) (ref 547). The roof was destroyed by another fire in 1983 and the magazine is not currently in use (ref 547).

Flooring

Wood

Disposal Information

Contaminated soil excavated and back-filled with clean soil in 1988.

Activities (inside/outside)

None identified outside of Magazine 2.

Records Research Report Addenda Data

The roof was destroyed in the 1922 fire and was replaced in 1930 (ref 267).

Records Research Report Comments

Originally identified by DoD as Magazine 1. Magazine 2 was used to store ammunition, including Class D explosives (ammonium picrate) and black powder (ref 214). BCL Associates, an environmental consulting firm, conducted a preliminary hazardous waste assessment in 1987 for metals in soil and concluded that elevated concentrations of lead, to a maximum of 14,000 milligrams per kilogram (mg/kg), were present in near-surface soils around Magazine 2 (ref 547). In 1988, Harding Lawson Associates (HLA) conducted additional soil investigation around Magazine 2 for Benicia Industries, Inc. (In the HLA report, Magazine 2 is identified as Magazine 1.) Thirty-six soil samples were collected around the magazine. Five of the 36 samples had lead concentrations higher than 1,000 mg/kg. All five of these samples were collected within a 10-foot radius around Magazine 2 in the top 0.5 feet of soil (ref 547). HLA recommended that 100 cubic yards of contaminated soil be excavated and removed from the site (ref 547). A cleanup level of 750 mg/kg was set, and the affected soil was excavated and replaced with imported clean fill (ref 546).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

RIFS

COMMENTS

Previous HTRW clean-up effort completed at this site. This site was also investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138).

PA Summary

DoD Site #

2

Area: M

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

3

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD

Year Bldg. Built	1857	Year Bldg. Removed	1922	Site Area (SqFt)	3748
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Current Land Use Industrial-Limited

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Powder Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Magazine 3 presumably is the structure identified as Magazine 1 in reference 126, and was characterized as destroyed in the 1922 fire. According to records documenting the destruction from the fire, one magazine was completely destroyed. Aerial photographs from 1924 and 1928 indicate that the magazine in this location was completely destroyed following the fire.

Records Research Report Comments

No longer present and destroyed in the 1922 fire. A 1924 aerial photograph shows the location of the former magazine. In 1907, used to store smokeless cartridges (ref 214).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). An August 12, 1922 document (RRR, ref 166) lists the buildings damaged during the 1922 fire and the salvage value of items remaining in each damaged building. These items included cartridges, grenades, shells and bombs. Further analysis was conducted to determine the location of the former magazine in relation to current structures. Landmarks (e.g. former magazine footprint, roads and nearby Magazine 2) were used to locate Site 8 former Magazine 3 on a 1924, 1952 and 1988 aerial photographs. In 1924, two years after the fire, the former location of the magazine is clearly depicted. In 1952, the former magazine and the area north of the former magazine have been graded. In 1988, the graded area is a parking lot. The graded area and parking lot coincides with PA site, OS25A. OS25A was a former open storage area that reportedly received fill materials from another a nearby open storage areas - OS 25. In summary, the area of former Magazine 3 has been graded,

PA Summary

DoD Site #

3

Area: M

covered by fill material and now is an asphalt covered parking lot. Historical information indicates that lead-containing ammunition was stored in the magazine during the 1922 fire. There was a possibility of lead contamination in surface soil associated with destruction of the magazine in the 1922 fire. However, with the changes in the landscape due to subsequent grading and filling of the area, it would be very difficult to find such contamination (if it exists).

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

5

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-060	BENICIA CITY				
Year Bldg. Built	Pre 1945	Year Bldg. Removed	1962-1998	Site Area (SqFt)	2646
Current Land Use	Open Space-Parks				

OPERATIONAL HISTORY

DoD Use Type

Hospital, Laundry, and Temporary Buildings

DoD Uses

Photographers Shop

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Listed

Activities (inside/outside)

Unknown

Records Research Report Addenda Data

Building appears on a 1954 map (ref 646). Building is listed on a 1962 Building Zone List as being vacant (ref 713).

Records Research Report Comments

Records Research does not specifically mention this building. However, Drawing 4062, dated September 7, 1945 (ref 650) lists this building as a "Photographers Shop". The building is no longer present. Additionally, Drawing 6008, dated January 1958 illustrates the Arsenal sewer system and shows an abandoned line at former Building 5 (ref 636).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records to indicate if photographic processing was performed in this building. Additionally the building was demolished and the site redeveloped.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

7

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-230	BENICIA CITY	2090 CAMEL ROAD			
Year Bldg. Built	1855	Year Bldg. Removed	Not applicable	Site Area (SqFt)	8120
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordinance Storage

DoD Uses

Ordinance, Storehouse, Indoor Firing Range

Secondary DoD Uses

Building

Post-Army Uses

City of Benicia Police Department (ref 286). The Benicia Historical Museum and Cultural Foundation uses the building for general storage.

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

In 1915, used mostly as a warehouse for temporary storage of ammunition awaiting shipment (ref 205). Identified as an interior Pistol Range with vacate date of 3/31/64 (ref 713).

Records Research Report Comments

Damaged in 1922 fire.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). According to the Camel Barn Museum, current tenant of building, there are no remnants of the range remaining.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

8

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-230	BENICIA CITY	2090 CAMEL ROAD			
Year Bldg. Built	1856	Year Bldg. Removed	Not applicable	Site Area (SqFt)	1082
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Ammunition Shop/Radio Mars

Secondary DoD Uses

Building

Post-Army Uses

The building was leased to Jerry Goss in 1973 and 1977 for storage of art supplies and related machinery, and for use as an art studio (ref 702). Currently being used as an administrative office for the Benicia Historical Museum and Cultural Foundation.

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

In 1923, Building 8 was used to break down small arms ammunition (ref 121). A Building Zone list from 1962 specified that Building 8 was used as a radio station called "Mars" with a proposed vacate date of September 1962 (ref 713).

Records Research Report Comments

Designated as an engine house, and as a cartridge bag shop (old guard house) on a sequence of early maps through 1918 (ref 654).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

9

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-230	BENICIA CITY	2090 CAMEL ROAD			
Year Bldg. Built	1855	Year Bldg. Removed	Not applicable	Site Area (SqFt)	8216
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Ordnance Storehouse, Ammo Shop and Utilities Building

Secondary DoD Uses

Building

Post-Army Uses

Building 9 was leased to Wayne Carlson in 1973 and 1977 for the manufacture of hand-painted wallpaper (ref 425 and 702). Currently houses the Camel Barn Museum, operated by the Benicia Historical Museum and Cultural Foundation.

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside and outside

Records Research Report Addenda Data

During the late 1850s, the Army experimented with camels as an alternate means of transportation in the deserts of the southwest. The camels were kept in a corral some distance south of Buildings 7 and 9. The misnomer of Camel Barns has become attached to those structures even though the buildings were not barns and had no known connection with the camels (ref 287). The camels were sold at auction at the Arsenal on 28 February 1864. A Building Zone list from 1962 states that Building 9 was used for furniture storage until closure in 1964 (ref 713).

Records Research Report Comments

Damaged in 1922 fire. Initially served as storehouse for gun carriages. Also used to store small arms, and to house troops before barracks were completed.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Site was damaged in the 1922 fire. In late 2000, FA/BC provided unexploded ordnance/ordnance and explosive (UXO/OE) avoidance support services at the Camel Barn Museum and near the I-680/I-780 interchange. These services were performed during the following activities: during drilling by Caltrans, installation of a fence, and visual inspection of an area adjacent to a parking lot (Building 9) (ref 1132). On 6 July 2000, a large UXO item was observed lying on an asphalt surface adjacent to a former Arsenal bunker. The bunker is immediately north of the Camel Barn on Benicia Industries property. It was uncovered approximately two months prior during some construction work. EOD team determined the item was safe to transport and

PA Summary

DoD Site #

9

Area: M

hauled it offsite (ref 1112). In 1999, the USACE conducted an EE/CA field investigation for the entire former Arsenal in which 15 OE items were encountered in the Camel Barn Area (ref 1100). This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

10

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address	
0080-120-240	BENICIA CITY		
Year Bldg. Built	1857	Year Bldg. Removed	Not applicable
Current Land Use	Industrial-Limited		
		Site Area (SqFt)	3717

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Powder Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

The magazine is currently the property of the City of Benicia and is being used by the Camel Barn Museum to display historical records and ordnance.

Flooring

Wood

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

In 1907, stored up to 3,000 barrels of black powder (ref 214). A Photograph taken in 1963, depicts a cistern located on the west end of Magazine 10. The cistern potentially remains in place and has presumably been covered by soil excavated from the construction of Highway 680.

Records Research Report Comments

Roof damaged in the 1922 fire, and was repaired. Area formerly known as Ordnance Canyon.

ENVIRONMENTAL SUMMARY

Vessel Inventory

Vessel #	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
1	UST	US Army	0	Unknown	Water	Unknown	1964	No	<input type="checkbox"/>

Uses: Cistern

Comments: The cistern potentially remains in place and has presumably been covered by soil excavated from the construction of Highway 680.

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There was a converted cistern near this site which use to store pyrotechnics per Milburn, former Arsenal employee, but records

PA Summary

DoD Site #

10

Area: M

suggests that he probably was referring to Magazine 12. (ref 1076). This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

12

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)

Owner Name

Site Address

CAL TRANS Right-of-Way

STATE OF CALIFORNIA

Year Bldg. Built

1926

Year Bldg. Removed

1960's

Site Area (SqFt)

3727

Current Land Use

Hwy

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Powder Magazine, Chemical Warfare Material Storage

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Brick and Concrete

Disposal Information

None identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Originally a cistern (a large tank for storing water) was built in 1880 (ref 267), in 1926 the cistern was reconditioned for use as a storage magazine. This magazine was used for the storage of chemical warfare materiel (CWM) (ref 544). A document entitled Handbook for the Handling of Chemical Warfare Agents prepared in 1951 indicates that a cabinet containing first aid supplies for gas-affected casualties and decontamination equipment for CWM hazards was installed in Magazine 12 (ref 9). The magazine was demolished during the construction of Highway 680, some time after 1964 (ref 718). This site is incorrectly labeled as Magazine 2 on Plate 2 of the 1997 USACE Archives Search Report Supplement (ref 544). In addition, the 1997 USACE Archives Search Report labeled this magazine as the Area 6 Modified Cistern (ref 544).

Records Research Report Comments

Magazine 12 had four equal compartments connected by arched openings. Four ventilators were installed in the roof over old manholes. Two doors made of sheet steel were attached to openings cut in the magazine's west end, and two small windows were installed in the east end (ref 267). As shown in aerial photographs, Magazine 12 was located approximately 1,100 feet east of Building 7.

ENVIRONMENTAL SUMMARY

Vessel Inventory

Vessel #	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
1	UST	US Army	0	Unknown	Water, CWM	1880	1964	No	<input type="checkbox"/>

Uses: Cistern

Comments: Originally a cistern (ref 267), and was modified for chemical warfare materiel (CWM) storage in 1926 to expand storage capacity for chemical warfare agents (ref 544). Demolished during Hwy 680 construction.

PA Summary

DoD Site #

12

Area: M

Furthest Stage of Environmental Investigation

NONE

COMMENTS

The site was demolished during construction of the I-680/I-780 interchange. The expansion of I-680 will overlie this former site. Prior to these construction activities, this site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

13

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
CAL TRANS Right-of-Way	STATE OF CALIFORNIA				
Year Bldg. Built	1903	Year Bldg. Removed	1960's	Site Area (SqFt)	4210
Current Land Use	Hwy				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Powder Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Used to store smokeless powder (nitrocellulose) per a 1910 report (ref 148). Magazine 13 is a brick warehouse per drawings (ref 375).

Records Research Report Comments

Building destroyed during the construction of Interstate 680 (ref 718). The magazine was demolished during the construction of Highway 680, some time after 1964 (ref 718).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Destroyed during construction of the I-680/I-780 interchange. Existing interchange overlies former site.

RECOMMENDATIONS

Therefore, no DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

14

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
CAL TRANS Right-of-Way	STATE OF CALIFORNIA	

Year Bldg. Built	1903	Year Bldg. Removed	Post 1964	Site Area (SqFt)	1902
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Current Land Use Hwy

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Powder magazine

Secondary DoD Uses

Magazine

Post-Army Uses

Office for the Benicia-Martinez Toll Bridge Authority

Flooring

Unknown

Disposal Information

None Listed

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Used to store smokeless powder (nitrocellulose, ref 148), according to a 1910 report.

Records Research Report Comments

Building constructed of wood and brick (ref 267). A concrete-lined underground tank 30 feet in diameter, located approximately 50 feet west of the northern side of Magazine 14, was identified on two drawings dated 21 October 1958 (one shows roads, railroads, and structures [ref 376] and one shows utilities [ref 398]. (see Concrete Lined Underground Tank)

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

The area was demolished during the construction of the I-680/I-780 interchange.

RECOMMENDATIONS

Therefore, no DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

15(B)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-010	VALERO REFINING COMPANY CALIF				
Year Bldg. Built	1926	Year Bldg. Removed	1932-1954	Site Area (SqFt)	1217
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

High-Explosives Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Structure made of concrete and sheet iron

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

On the General Map of the Benicia Ordnance Depot dated 18 May 1932, the magazine is identified as Building 15 (ref 651). This structure does not appear on a 1954 drawing (ref 646).

Records Research Report Comments

Underground high-explosives magazine (ref 267). Built of concrete and sheet iron.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no reported HTRW related issues for this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

16(A)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-140	BENICIA INDUSTRIES INC				
Year Bldg. Built	Pre-1932	Year Bldg. Removed	1939	Site Area (SqFt)	5037
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Ammunition Renovation Plant

Secondary DoD Uses

Unknown

Post-Army Uses

None listed

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Building 16(A) was located on the site of Pine Lake within the ammunition renovation and salvage area. No further information is available about the renovation and salvage area following a 1922 fire. This building was removed during excavation procedures for lake construction (in 1939). The current landowner is Benicia Industries, Inc.

Records Research Report Comments

A 1932 General Map for the Benicia Arsenal identifies Building 16(A) as a Renovation Plant (ref 651). Practices at renovation facilities at the Arsenal included operations such as the breakdown, cleaning, and processing of ammunition casings. Records were not located that detail the specific processes and chemicals used in the renovation operations.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

The area was demolished during the construction of Pine Lake (R4). There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

16(B)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-140-680		
Year Bldg. Built	1942	Year Bldg. Removed
		Post 1964
Current Land Use	Industrial-Limited	
	Site Area (SqFt)	48

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Pump House

Secondary DoD Uses

Pump House

Post-Army Uses

City of Benicia for water supply pumping.

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

A 1962 Building Zone List identifies Building 16 with an approximate date to vacate 3/31/64 (ref 713).

Records Research Report Comments

Beneficial use. Constructed of concrete.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

The site of this building was formerly Building 16(A) - ammunition renovation plant, which was removed during the excavation for Pine Lake (R4) in 1939. See Site 16(A) for more details. Based on the age of the building, electricity was common at this time and was the likely power source for the pump. There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

17

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-140-670	BENICIA CITY				
Year Bldg. Built	1941	Year Bldg. Removed	Post 1964	Site Area (SqFt)	100
Current Land Use	Public				

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Booster Pump House

Secondary DoD Uses

Pump House

Post-Army Uses

City of Benicia for water supply pumping

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

A 1962 Building Zone List identifies Building 17 with an approximate date to vacate 3/31/64 (ref 713).

Records Research Report Comments

Beneficial use. Constructed of concrete. Designated as a pump house for fire-fighting water.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Based on the age of the building, electricity was common at this time and was the likely power source for the pump. There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

19

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-140	BENICIA INDUSTRIES INC				
Year Bldg. Built	1943	Year Bldg. Removed	Post 1964	Site Area (SqFt)	227
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Pump House

Secondary DoD Uses

Pump House

Post-Army Uses

City of Benicia for water supply pumping.

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

A 1962 Building Zone List identifies Building 19 with an approximate date to vacate 3/31/64 (ref 713).

Records Research Report Comments

Constructed of concrete. Pump house to distribute water from Pine Lake to reservoir R1 (ref 196).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Based on the age of the building, electricity was common at this time and was the likely power source for the pump. There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

20

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address	
0080-340-020	KOERNER NORMAN D & BETTY L	3001 BAYSHORE ROAD	
Year Bldg. Built	1950	Year Bldg. Removed	Not applicable
Site Area (SqFt)	720		
Current Land Use	Industrial-General		

OPERATIONAL HISTORY

DoD Use Type

Tire Rebuild Facility

DoD Uses

Boiler House

Secondary DoD Uses

Unknown

Post-Army Uses

1968-1978: leased to Lutz Tire for the manufacture of tire and rubber products (ref 586 and 587).

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Unknown

Records Research Report Addenda Data

A 1954 map (ref 646) identified this building as a boiler house.

Records Research Report Comments

Diesel-fueled boiler. Supplied steam for heating and for tire processing operations in Building 155 (ref 118). It was located west of Building 155. Records do not give a clear indication as to the status of the boiler or fuel supply tank. An attempt was made in 1990 by the landowner to remove the boilers. According to the document as the workmen were removing the boilers a spark from the welding caught the grass and a grass fire ensued (ref 507). The report gives no further indication as to the completion of the removal of the boilers, or the disposal.

ENVIRONMENTAL SUMMARY

Vessel Inventory

Vessel #	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
1	AST or UST?	US Army	0	Unknown	Diesel	1950	Unknown	Unknown	<input type="checkbox"/>
Uses: Fuel Storage Comments: No clear indication of status. Used to heat boiler.									

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Additional research was conducted during a site visit on 10/8/03. The boiler house has been renovated to an office. The UST

PA Summary

DoD Site #

20

Area: M

was removed and investigated by the landowner. The site is closed to further environmental action.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

50

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address	
0080-140-050	BENICIA CITY		
Year Bldg. Built	Pre-1945	Year Bldg. Removed	1954-1961
		Site Area (SqFt)	846
Current Land Use	Industrial-General		

OPERATIONAL HISTORY

DoD Use Type

Heavy Equipment Yard

DoD Uses

Paint Shop/Equipment Shop

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside/Outside

Records Research Report Addenda Data

According to the Case Closure Summary for SCDEM for record number 20030, a site investigation was conducted by Toyota Motor Sales, located at 1 Oak Road (located in the area of former Building 50) approximately 100 feet southwest of former OS14) (ref 494). Two tanks were removed and a soil investigation was conducted. A 3,000-gallon kerosene tank was removed on 5 January 1987 and a 10,000-gallon gasoline tank was removed on 14 February 1995. Six monitoring wells were installed. Soil and groundwater samples were collected. High concentrations of benzene, total petroleum hydrocarbons as gasoline, lead, and ethylbenzene were reported. The contaminated soil was excavated from the former kerosene tank site on 21 January 1987, and from the former gasoline tank site on 5 April 1995. The highest result in groundwater was 130 ppb TPH in a well nearest to the former kerosene tank. In May 1995, only one of the six wells contained groundwater. The SCDEM issued a UST site closure letter for these locations on 16 November 1995. No further investigation or action at this site was required (ref 494).

Records Research Report Comments

Located in the far southeastern portion of Area M near OS14. Records research offered little detail regarding operations in the heavy equipment yard. A paint shop (Building 50) and an equipment shop (Building 111) were located in this area and near Army Point. The (exact) construction dates for these buildings are unknown. Building 50 reportedly maintained a 500-gallon stove oil tank and two 5,500-gallon road oil tanks (ref 167). Presumably, these buildings were demolished by DoD prior to 1961, as none of these structures are listed in the 1961 Facility Data Sheet (ref 196), and no buildings remain today. Building appears on a 1954 map (ref 646).

ENVIRONMENTAL SUMMARY

Vessel Inventory

Type	Original Owner	Size (Gal)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army

PA Summary

DoD Site #

50

Area: M

Vessel Inventory

Vessel #	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 1	AST or UST?	Unknown	500	Unknown	Stove Oil	Unknown	Unknown	Unknown	<input type="checkbox"/>
Uses: Oil Storage									
Comments:									
Vessel # 2	AST or UST?	Unknown	5500	Unknown	Road Oil	Unknown	Unknown	Unknown	<input type="checkbox"/>
Uses: Oil Storage									
Comments:									
Vessel # 3	AST or UST?	Unknown	5500	Unknown	Road Oil	Unknown	Unknown	Unknown	<input type="checkbox"/>
Uses: Oil Storage									
Comments:									
Vessel # 4	UST	Unknown	3000	Unknown (likely steel)	Kerosene	Post 1964	01/05/87	Unknown	<input checked="" type="checkbox"/>
Uses: Fuel Storage									
Comments: Site investigation by Toyota Motor Sales. Contaminated soil excavated, site closed on 16 Nov. 1995.									
Vessel # 5	UST	Unknown	10000	Unknown (likely steel)	Gasoline	Post 1964	04/05/95	Unknown	<input checked="" type="checkbox"/>
Uses: Fuel Storage									
Comments: Site investigation by Toyota Motor Sales. Contaminated soil excavated, site closed on 16 Nov. 1995.									

Furthest Stage of Environmental Investigation

RIFS

COMMENTS

According to ref 167, the building was present in 1957 and was an office for the Heavy Equipment Yard. The USTs that were removed and investigated in 1987 through 1995 are assumed not to be the same tanks associated with the former Building 50 oil storage tanks since the sizes are not the same. The post-Army USTs are closed to further regulatory action. According to the case closure summary (ref 1029), oil and grease were not analyzed in the soil or groundwater. Therefore, impacts from a possible release from the oil tanks is not known and cannot be determined from this post-Army investigation. Additionally, it is not known if the oil tanks were ASTs or USTs.

RECOMMENDATIONS

Additional research is recommended to determine if the tanks removed in 1987 are associated with 500-gallon stove oil or 5,500 gallon road oil tanks.

PA Summary

DoD Site #

75

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	1929	Year Bldg. Removed	Not applicable	Site Area (SqFt)	3979
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Type 32 Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

Allied Muffler Manufacturing, from 1969 to 1976, for the fabrication and distribution of mufflers (ref 586 and 587).

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

Constructed of concrete, tile, and iron (ref 267). These magazines were built on the site of the original cemetery, located 200 feet east of Pine Lake. Several soldiers' graves were uncovered during the construction (ref 143).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

76

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)

Owner Name

Site Address

0080-120-220

BENICIA INDUSTRIES INC

2024 CAMEL ROAD

Year Bldg. Built

1929

Year Bldg. Removed

Not applicable

Site Area (SqFt)

3979

Current Land Use

Industrial-Limited

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Type 32 Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

Allied Muffler Manufacturing, from 1969 to 1976, for the fabrication and distribution of mufflers (ref 586 and 587).

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

Constructed of concrete, tile, and iron (ref 267). These magazines were built on the site of the original cemetery, located 200 feet east of Pine Lake. Several soldiers' graves were uncovered during the construction (ref 143). No definition of Type 32 Magazine found.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

77

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	1930	Year Bldg. Removed	Post 1998	Site Area (SqFt)	1000
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Underground Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

The Magazine was still present when the Records Research Report was being developed in 1998.

Records Research Report Comments

Used for explosives storage, 1,000 square feet concrete structure (ref 267). Magazine 77 is located approximately 300 feet southeast of Building 7 (ref 378).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

78

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	1930	Year Bldg. Removed	Post 1998	Site Area (SqFt)	1000
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Underground Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

Imperial West Chemical leased Magazines 78 and 79 from 1973 to 1977 for chemical processing (ref 418 and 702).

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

The Magazine was still present when the Records Research Report was being developed in 1998.

Records Research Report Comments

Used for explosives storage, 1,000 square feet concrete structure (ref 267). Located approximately 500 feet northeast of Building 7 (ref 650).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

79

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	1930	Year Bldg. Removed	Post 1998	Site Area (SqFt)	1000
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Underground Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

Imperial West Chemical leased Magazines 78 and 79 from 1973 to 1977 for chemical processing (ref 418 and 702).

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

The Magazine was still present when the Records Research Report was being developed in 1998.

Records Research Report Comments

Used for explosives storage, 1,000 square feet concrete structure (ref 267). Located approximately 500 feet northeast of Building 7 (ref 650).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

80

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	1930	Year Bldg. Removed	Post 1998	Site Area (SqFt)	1000
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Underground Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

The Magazine was still present when the Records Research Report was being developed in 1998.

Records Research Report Comments

Used for explosives storage, 1,000 square feet concrete structure (ref 267). Located approximately 500 feet northeast of Building 7 (ref 650).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

81

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-170	BENICIA INDUSTRIES INC	2045 CAMEL ROAD			
Year Bldg. Built	1930	Year Bldg. Removed	Not applicable	Site Area (SqFt)	6150
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Type 34 Magazine/Storehouse

Secondary DoD Uses

Magazine

Post-Army Uses

Imperial West Chemical leased Magazine 81 from 1971 to 1977 for warehousing, processing, packaging, and the mixing of chemicals (ref 587 and 602).

Flooring

Structure constructed of concrete, tile and iron

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

Considered a Type 34 structure (research found no definition of Type 34 structure). Constructed of concrete, tile, and iron (ref 196). Located approximately 500 feet west and northwest, respectively, of Building 7.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

82

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-180	BENICIA INDUSTRIES INC	2161 CAMEL ROAD			
Year Bldg. Built	1930	Year Bldg. Removed	Not applicable	Site Area (SqFt)	6150
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Type 34 Magazine/Storehouse

Secondary DoD Uses

Magazine

Post-Army Uses

1968 to 1988: United Centrifugal Pumps as a machine shop for the manufacture, repair, and storage of hydrocarbon pumps (ref 418 and 587).

Flooring

Structure constructed of concrete, tile & iron

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

Considered a Type 34 structure (research found no definition of Type 34 structure). Constructed of concrete, tile, and iron (ref 196). Located approximately 500 feet west and northwest, respectively, of Building 7.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

83

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-190	BENICIA INDUSTRIES INC	2283 CAMEL ROAD			
Year Bldg. Built	1930	Year Bldg. Removed	Not applicable	Site Area (SqFt)	6150
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Type 34 Magazine/Storehouse

Secondary DoD Uses

Magazine

Post-Army Uses

Rotorcraft (formerly Reed Industries, owned by Willis Reed) occupied Magazine 83 from 1971 to 1981 (ref 418 and 587) for the assembly and distribution of plastic toys and cardboard containers.

Flooring

Structure constructed of concrete, tile & iron

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

Considered a Type 34 structure (research found no definition of Type 34 structure). Constructed of concrete, tile, and iron (ref 196). Magazine 83 is located approximately 800 feet north of Building 7 (ref 650).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

84

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)

Owner Name

Site Address

0080-120-010

VALERO REFINING COMPANY CALIF

Year Bldg. Built

1930

Year Bldg. Removed

1962-1970

Site Area (SqFt)

6150

Current Land Use

Industrial-General

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Type 34 Magazine/Storehouse

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

The United States Army Corps of Engineers (USACE) evaluated the magazines in 1993 for the presence of Ordnance and Explosive Waste (OEW) (ref 544). USACE personnel conducted interviews with employees from Benicia Industries, Inc., the Benicia Fire Department, the Benicia Police Department, and Exxon, and with several historians, all of whom were familiar with the Arsenal property and potential OEW contamination. The interviews were followed by site visits to visually inspect the contents within magazines, and to examine debris lying around magazine exterior areas (ref 542), and none was found.

Records Research Report Comments

Considered a Type 34 structure (research found no definition of Type 34 structure). Located 2,400 feet north of Building 7 (ref 650).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

85

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-010	VALERO REFINING COMPANY CALIF				
Year Bldg. Built	1930	Year Bldg. Removed	Post 1962	Site Area (SqFt)	6150
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Type 34 Magazine/Storehouse

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

The United States Army Corps of Engineers (USACE) evaluated the magazines in 1993 for the presence of Ordnance and Explosive Waste (OEW) (ref 544). USACE personnel conducted interviews with employees from Benicia Industries, Inc., the Benicia Fire Department, the Benicia Police Department, and Exxon, and with several historians, all of whom were familiar with the Arsenal property and potential OEW contamination. The interviews were followed by site visits to visually inspect the contents within magazines, and to examine debris lying around magazine exterior areas (ref 542), and none was found.

Records Research Report Comments

Considered a Type 34 structure (research found no definition of Type 34 structure). Located 2,400 feet north of Building 7 (ref 650). Structure appears on a 1962 Building Zone List with an approximate date to vacate on July 6, 1962 (ref 713).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

86

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-010	VALERO REFINING COMPANY CALIF				
Year Bldg. Built	1930	Year Bldg. Removed	Mid 1960's	Site Area (SqFt)	1200
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Ordnance Storage

DoD Uses

Underground Magazine

Secondary DoD Uses

Magazine

Post-Army Uses

None Identified

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

In the mid-1960s, Magazine 86 was demolished (ref 718).

Records Research Report Comments

Used for explosives storage (ref 267). Building demolished in the mid 1960s, the site was used for the disposal of excavation materials for the department of highways during Interstate 680 and 780 construction (ref 718 and 464).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

96

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
CAL TRANS Right-of-Way	STATE OF CALIFORNIA				
Year Bldg. Built	Unknown	Year Bldg. Removed	1960's	Site Area (SqFt)	1658
Current Land Use	Hwy				

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Shell Loading Office

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Structure constructed of concrete & iron

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Constructed of concrete and iron in 1943 (ref 196). A 1945 map (ref 650) identified Building 96 as a shell loading facility located in the vicinity of former Quarry 2. A 1954 map (ref 646) listed this building as an Ammunition Demolition facility.

Records Research Report Comments

Removed during construction of Interstate 680 (ref 718).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Site was demolished during construction of the I-680/I-780 interchange. This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

97(B)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)

Owner Name

Site Address

CAL TRANS Right-of-Way

STATE OF CALIFORNIA

Year Bldg. Built

Unknown

Year Bldg. Removed

1960's

Site Area (SqFt)

1207

Current Land Use

Hwy

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Shell Loading Office

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

A 1945 map (ref 650) identified Building 97 as the shell loading office located in the vicinity of former Quarry 2. A 1954 map identified building as a transformer house (ref 646).

Records Research Report Comments

Site demolished during construction of Interstate 680 (ref 718).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Site was demolished during construction of the I-680/I-780 interchange. This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

109

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)

Owner Name

Site Address

CAL TRANS Right-of-Way

STATE OF CALIFORNIA

Year Bldg. Built

Unknown

Year Bldg. Removed

1960's

Site Area (SqFt)

1207

Current Land Use

Hwy

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Deboosting Barricade

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Listed

Activities (inside/outside)

Outside

Records Research Report Addenda Data

Building 109 is shown on a 1945 map (ref 650) and also on a 1954 map (ref 646) as a concrete deboosting barricade located in the vicinity of former Quarry 2.

Records Research Report Comments

The structure measured 392 ft2 (ref 718), and was presumably used as a protection barrier during operations at the primer destruction facility. This building was removed during construction of Interstate 680 (ref 718).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Site was demolished during construction of the I-680/I-780 interchange. This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

111

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-140-050	BENICIA CITY	
Year Bldg. Built	Pre-1945	Year Bldg. Removed
		1957-1961
Current Land Use	Industrial-General	Site Area (SqFt)
		1728

OPERATIONAL HISTORY

DoD Use Type

Heavy Equipment Yard

DoD Uses

Heavy Equipment Shop

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Outside/Inside

Records Research Report Addenda Data

(According to ref 167, the building was present in 1957). Presumably, building was demolished by DoD prior to 1961, because the buildings is not listed in the 1961 Facility Data Sheet (ref 196), and no building remains today.

Records Research Report Comments

The third sanitary line handled waste from Buildings 50, 111, and 136 and discharged at Point D (ref 405). Building 136 is shown attached to the east side of Building 111. Records research offered little detail regarding operations in the heavy equipment yard.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Records Research is unclear on site activities. Unknown what happened to the shop.

RECOMMENDATIONS

A subsurface investigation is recommended to determine the presence or absence of fuel, oils, and solvents in groundwater downgradient of the site for a potential release from cleaning activities at the heavy equipment yard.

PA Summary

DoD Site #

112

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-150	USA				
Year Bldg. Built	1942	Year Bldg. Removed	Post 1962	Site Area (SqFt)	96
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Booster Pump House

Secondary DoD Uses

Pump House

Post-Army Uses

None Identified

Flooring

Structure constructed of wood and concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Appears on a 1954 map (ref 646). Structure is listed as vacant on a 1962 Building Zone List (ref 713).

Records Research Report Comments

Constructed from concrete and wood. Used as a water pump house (ref 196).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Based on the age of the building, electricity was common at this time and was the likely power source for the pump. There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

136

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-140-050	BENICIA CITY				
Year Bldg. Built	Pre-1945	Year Bldg. Removed	1954-1961	Site Area (SqFt)	1693
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Heavy Equipment Yard

DoD Uses

Heavy Equipment Storage

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside/Outside

Records Research Report Addenda Data

Presumably, the building was demolished by DoD prior to 1961, because this structure is not listed in the 1961 Facility Data Sheet (ref 196), and no buildings remain today. Building appears on a 1954 map (ref 646).

Records Research Report Comments

Located approximately 300 feet northeast of Building 50. However, on two drawings dated 21 October 1958, a utilities drawing (ref 398), and a roads, railroads, and structures map (ref 376) (Appendix C1), Building 136 is shown attached to the east side of Building 111.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

146

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
CAL TRANS Right-of-Way	STATE OF CALIFORNIA	
Year Bldg. Built	Year Bldg. Removed	Site Area (SqFt)
1943	Post 1954	338
Current Land Use		
Hwy		

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Surveillance Shelter, Railroad Dispatch Office

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside/Outside

Records Research Report Addenda Data

Structure appears on a 1954 map (ref 646).

Records Research Report Comments

Located approximately 700 feet northeast of Magazine 12, along Bayshore Road (ref 650). Served by a septic tank which discharged into a culvert under the Southern Pacific Railroad tracks and flowed into an open ditch and then into Suisun Bay.

ENVIRONMENTAL SUMMARY

Vessel Inventory

Vessel #	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
1	Septic Tank	US Army	0	Unknown	Sewage	1943	Unknown	Unknown	<input type="checkbox"/>
Uses: Septic Tank									
Comments:									

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Facility 146 was served by a septic tank which discharged into a culvert under the Southern Pacific Railroad tracks and flowed into an open ditch and then into Suisun Bay. There are no records indicating any potential environmental concerns related to DoD activities at this site.

PA Summary

DoD Site #

146

Area: M

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

147

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
CAL TRANS Right-of-Way	STATE OF CALIFORNIA				
Year Bldg. Built	Unknown	Year Bldg. Removed	1960's	Site Area (SqFt)	2410
Current Land Use	Hwy				

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Unknown

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Unknown

Records Research Report Addenda Data

Shown on a 1945 map (ref 650) as a vacuum cleaner building located in the vicinity of former Quarry 2.

Records Research Report Comments

Operations at the building are not known. This building was removed during construction of Freeway 680 (ref 718).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Site was demolished during construction of the I-680/I-780 interchange. This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

148

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
CAL TRANS Right-of-Way	STATE OF CALIFORNIA				
Year Bldg. Built	1943	Year Bldg. Removed	1960's	Site Area (SqFt)	96
Current Land Use	Hwy				

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Heating Plant/Tool Shed

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Built of concrete in 1943 (ref 196). A 1945 map (ref 650) also identified Building 148 as a heating plant located in the vicinity of former Quarry 2. A 1954 map (ref 646) listed this building as a tool shed.

Records Research Report Comments

This building was removed during construction of Interstate 680 (ref 718).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Site was demolished during construction of the I-680/I-780 interchange. This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

155

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-340-020	KOERNER NORMAN D & BETTY L	3001 BAYSHORE ROAD
Year Bldg. Built	1944	Year Bldg. Removed
		Not applicable
Current Land Use	Industrial-General	
	Site Area (SqFt)	24882

OPERATIONAL HISTORY

DoD Use Type

Tire Rebuild Facility

DoD Uses

Field Office/Tire Recapping after 1950

Secondary DoD Uses

Unknown

Post-Army Uses

The Lutz Tire Co.: 1968 to 1978 for use as an office space and for the recapping of tires and manufacturing of rubber products (ref 418, 586, and 587). The site was eventually purchased by Lutz Tire (ref 503).

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside/Outside

Records Research Report Addenda Data

Converted from an office to a tire rebuilding facility (ref 14). Contained a tire rebuild work area, a compressor room, a boiler room, and a cementing room. Main functions of facility were to rebuild, repair and inspect tubes, tires, and flaps, and to fabricate rubber products for the maintenance shop (ref 11). Reported in a USACE Excess Real Estate schedule also listed a paint spray booth associated with Building 155 (ref 716).

Records Research Report Comments

Tetratech, Inc. conducted a site investigation on 9 September 1987. A 6-inch polyvinyl chloride (PVC)-cased well, without a dedicated pump, was found at the northwestern corner of the property. Surface soil discoloration resembling crankcase oil spillage was found along the northern portion of the site. Soil discoloration was also found along the western site boundary. A former chemical storage area was found on the western side of Building 155. A chemical list attached to the wall indicated storage of such chemicals as paraffins, rubber solvents, trichloroethene (TCE), the alkyl-alkanol-amine family, hydrocarbon resins, zinc stearate, and olefin polymers. Solano County records indicate that three USTs were located on the west side of Building 155. Records indicate that the tanks were installed around 1978 by parties unknown. Two of the tanks were 1,000-gallon leaded fuel tanks and the other was a 1,000-gallon virgin oil tank (ref 507). Aqua Science Engineers removed the tanks in July 1988 and collected soil samples from the excavation pits. Analytical results from the soil samples indicated the soil was contaminated with total petroleum hydrocarbon (TPH) gas; and benzene, toluene, ethylbenzene, and xylene (BTEX). Evidence of what may have been a grease pit or trap, approximately two feet by two feet and containing residual grease or oil, was found within the chemical storage area. Aqua Science Engineers conducted another site investigation in December 1988 and collected soil and groundwater samples. Based on the analytical results, groundwater did not appear to have been impacted by the residual soil contamination present at the former UST locations. The site was closed by the Solano County Department of Environmental Management on 22 April 1997 (record number 20055, ref 507).

PA Summary

DoD Site #

155

Area: M

ENVIRONMENTAL SUMMARY

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 1	UST	Unknown	1000	Unknown	Leaded Gasoline	1978	1988	N/A	<input checked="" type="checkbox"/>

Uses: Fuel Storage

Comments:

Vessel # 2	UST	Unknown	1000	Unknown	Leaded Gasoline	1978	1988	N/A	<input checked="" type="checkbox"/>
------------	-----	---------	------	---------	-----------------	------	------	-----	-------------------------------------

Uses: Fuel Storage

Comments:

Vessel # 3	UST	Unknown	1000	Unknown	Virgin Oil	1978	1988	N/A	<input checked="" type="checkbox"/>
------------	-----	---------	------	---------	------------	------	------	-----	-------------------------------------

Uses: Oil Storage

Comments:

Furthest Stage of Environmental Investigation

RIFS

COMMENTS

An environmental investigation was conducted to determine the impacts to soil and groundwater from 3 former USTs installed after the Army. The site was closed by the local agency in terms of the USTs. However, the investigation indicates that there was no impact to groundwater. Therefore, if there was a possible release to the environment during DoD activities at the building, then it would have been found during this investigation.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

160

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-140-450	BENICIA INDUSTRIES	981 BAYSHORE ROAD
Year Bldg. Built	1945	Year Bldg. Removed
		1964-1998
Current Land Use	Industrial-Waterfront	
	Site Area (SqFt)	400

OPERATIONAL HISTORY

DoD Use Type

Industrial/Manufacturing Shops

DoD Uses

Boiler House

Secondary DoD Uses

Fuel type

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

Unknown

Activities (inside/outside)

Inside

Records Research Report Addenda Data

The building shows up on a 1962 building zone list with an approximate date to vacate of March 1964 (ref 713). 1948 a fuel line was associated with this boiler room. 1961 Facility Data Sheet indicates that a gas fired boiler had been installed in 1944.

Records Research Report Comments

Demolished by Benicia Industries. Records indicate that the building is no longer present. The boiler had been removed prior to the publication of the Records Research Report (ref 196).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

According to Drawing 4497, dated 10 November 1948, a fuel line was associated with this boiler house (ref 617) that may have been for natural gas. The drawing labels the line as "fuel gas" and "gas". A potable water line appears to be next to the "fuel gas" line. There are known USTs in the area of Building 157. It is most likely that the line was natural gas. There are no records indicating any potential environmental concerns related to DoD activities at this building.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

170

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD			
Year Bldg. Built	1945	Year Bldg. Removed	1973-1998	Site Area (SqFt)	3840
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Motor Pool Area

DoD Uses

Auto Parts/Office/Storehouse

Secondary DoD Uses

Unknown

Post-Army Uses

1973: Harold Frazier for storage of household and construction materials (ref 418).

Flooring

Wood

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

A 1945 map (ref 650) identified this building as an automotive parts storage structure. A 1954 map (ref 646) listed this building as a storehouse, and a Building Zone list from 1962 identified Building 170 as an office with a scheduled vacate date of March 1964 (ref 713).

Records Research Report Comments

Built of wood (ref 196). The building is no longer present. Available records indicate that the building was removed by the landowner.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

171

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-120-070	BENICIA INDUSTRIES INC	
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD

Year Bldg. Built: 1945 Year Bldg. Removed: 1964-1998 Site Area (SqFt): 1960

Current Land Use: Industrial-Limited

OPERATIONAL HISTORY

DoD Use Type

Motor Pool Area

DoD Uses

Vehicle Shop

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Maps from 1945 and 1954 identified this building as an automotive repair shop (ref 650 and 646).

Records Research Report Comments

Building was removed by current owner (date unknown).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Automotive maintenance and repair was performed in this building. Disposal practices unknown.

RECOMMENDATIONS

A subsurface investigation is recommended to determine the presence or absence of fuels, oils, and solvents in groundwater downgradient from this site for a potential release from former automotive maintenance and repair activities.

PA Summary

DoD Site #

172

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD			
Year Bldg. Built	1945	Year Bldg. Removed	1975-1998	Site Area (SqFt)	9720
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Motor Pool Area

DoD Uses

Vehicle Repair and Maintenance Shop

Secondary DoD Uses

Unknown

Post-Army Uses

Date unknown: office; 1973: electrical sign fabrication and repair by Nelson Neon; 1975: electrical contracting by Dolphin Engineering.

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Identified as Administrative Vehicle Shop with a vacate date of March 1964 (ref 713).

Records Research Report Comments

Building was removed by landowner.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Automotive maintenance and repair was performed in this building. Disposal practices unknown.

RECOMMENDATIONS

A subsurface investigation is recommended to determine the presence or absence of fuels, oils, and solvents in groundwater downgradient from this site for a potential release from former automotive maintenance and repair activities.

PA Summary

DoD Site #

173

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-120-070	BENICIA INDUSTRIES INC	
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD

Year Bldg. Built Year Bldg. Removed Site Area (SqFt)

Current Land Use

OPERATIONAL HISTORY

DoD Use Type

DoD Uses

Secondary DoD Uses

Post-Army Uses

Flooring

Disposal Information

Activities (inside/outside)

Records Research Report Addenda Data

Maps from 1945 and 1954 identified this building as an office and storehouse, respectively (refs 650 and 646). (The 1957 building inventory (ref 167) lists this building as the motor pool lunch room.) A 1962 Building Zone List identifies this structure as being vacant (ref 713).

Records Research Report Comments

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

COMMENTS

RECOMMENDATIONS

PA Summary

DoD Site #

175

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-120-070	BENICIA INDUSTRIES INC	
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD

Year Bldg. Built: 1955 Year Bldg. Removed: Post 1973 Site Area (SqFt): 160

Current Land Use: Industrial-Limited

OPERATIONAL HISTORY

DoD Use Type

Motor Pool Area

DoD Uses

Gasoline Service Station

Secondary DoD Uses

Unknown

Post-Army Uses

1971: Pasha Truckaways for a gasoline service station (ref 587); 1973: Humble Oil for a gasoline service station (ref 418).

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

None identified outside of building.

Records Research Report Addenda Data

Service Station scheduled to be vacated 12/31/63 (ref 713). Three fuel USTs: two 7500-gal tanks and one 2000-gal tank (ref 308 and 481).

Records Research Report Comments

Beneficial use. In 1986, Kaprealian Engineering, Inc., conducted a soil investigation during the removal of the three tanks associated with Building 175. After tank removal, two soil samples were collected at the base of each excavation pit. The analytical results from these samples indicate that the concentrations of total fuel hydrocarbons, benzene, toluene, and xylenes were below detection limits. No further investigation of this site was required (ref 481).

ENVIRONMENTAL SUMMARY

Vessel Inventory

Vessel #	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
1	UST	US Army	7500	Unknown (likely steel)	Unknown Fuel	1955	1986	Unknown	<input type="checkbox"/>

Uses: Fuel Storage

Comments:

2	UST	US Army	7500	Unknown (likely steel)	Unknown Fuel	1955	1986	Unknown	<input type="checkbox"/>
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Uses: Fuel Storage

Comments:

PA Summary

DoD Site #

175

Area: M

Vessel Inventory

	Type	Original Owner	Size (Gal.)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
Vessel # 3	UST	US Army	2000	Unknown (likely steel)	Unknown Fuel	1955	1986	Unknown	<input type="checkbox"/>

Uses: Fuel Storage

Comments:

Furthest Stage of Environmental Investigation

RIFS

COMMENTS

The USTs were removed and previous environmental investigation indicate no further action warranted.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

203 (at R1)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-140-670	BENICIA CITY				
Year Bldg. Built	1948	Year Bldg. Removed	Post 1964	Site Area (SqFt)	99
Current Land Use	Public				

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Water Chlorination

Secondary DoD Uses

None Identified

Post-Army Uses

City of Benicia for water treatment.

Flooring

Concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

A 1962 Building Zone List identifies Building 203 with an approximate date to vacate March 1964 (ref 713).

Records Research Report Comments

Beneficial use. Constructed of concrete, and served as a chlorination building at reservoir R1 (ref 196).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

208 (at R1)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-140-670	BENICIA CITY				
Year Bldg. Built	1956	Year Bldg. Removed	Post 1964	Site Area (SqFt)	332
Current Land Use	Public				

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Filtration Plant

Secondary DoD Uses

Pump House

Post-Army Uses

City of Benicia for water treatment.

Flooring

Structure constructed of wood & concrete

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

A 1962 Building Zone List identifies Building 16 with an approximate date to vacate March 1964 (ref 713).

Records Research Report Comments

Beneficial use. Constructed with wood and concrete.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

400 gpm capacity pump listed as of type "Clearwell to Backwash" (ref 1093). Based on the age of the building, electricity was common at this time and was the likely power source for the pump. There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Artesian well

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)

Owner Name

Site Address

0080-140-030

HEARTHSTONE PROP BENICIA LLC

Year Bldg. Built

1872-73

Year Bldg. Removed

Unknown

Site Area (SqFt)

50

Current Land Use

Industrial-General

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Irrigation/Boiler Water/Other Non-Potable Uses

Secondary DoD Uses

Well

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Listed

Activities (inside/outside)

Outside

Records Research Report Addenda Data

One report states that the well was later capped and abandoned in 1882 (ref 195).

Records Research Report Comments

Construction of an artesian well began in 1872 (ref 536). The well was drilled into strata so hard that at times drilling advanced only 1 inch per hour. Water was encountered at 960 feet bgs and again at 1,407 feet bgs. However, following analysis, the water at 1,407 feet bgs proved unfit for drinking. The well was backfilled to 960 feet bgs using cement, sand, and grain sacks (ref 536). Although the water from this well did contain organic matter and was still unfit for human use, it contained no lime or salt, and could be used for creating steam in shops and for Arsenal irrigation. Twenty-five pounds of high explosives were detonated at the 960-foot depth in hopes of opening channels in the rock to increase the 1,000-gallon per hour flow rate (ref 536). The experiment failed. A windmill and steam power were used at various times to pump water that was used to supply steam for the shops, irrigation water for trees, and dust-abatement for Arsenal roads (ref 536).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site. Therefore, no DoD action is indicated (NDAI) for this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Chemical Warfare Disposal

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-010	VALERO REFINING COMPANY CALIF				
Year Bldg. Built	Unknown	Year Bldg. Removed	Unknown	Site Area (SqFt)	120000
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Chemical Warfare Disposal

Secondary DoD Uses

Unknown

Post-Army Uses

Area of an existing refinery

Flooring

Soil

Disposal Information

Activities (inside/outside)

Records Research Report Addenda Data

None listed

Records Research Report Comments

According to Leroy Bailey, a former Arsenal employee, a poisonous gas disposal field was located in the vicinity of underground Magazine 86 and isolated by barbed wire fencing. Mr. Bailey was advised by his supervisor to keep clear of the area while putting in fire lines because chemical warfare materiel was buried there. Although it is known that thousands of 1-ton containers of CWM, principally mustard, phosgene, and chlorine gases, passed through the Arsenal en route to the Pacific during WW II; none was ever used during the war. Little of the CWM shipped out found its way back to the mainland, most having been dumped at sea. The Benicia Arsenal historical summary from September 1945 to July 1951 states only that "A few mustard gas or phosphorus containers were received and decontaminated by the Fire Department" (ref 232). Caleb Putnam, a former Arsenal employee, indicated in an interview that nine WWI mustard gas projectiles (155 mm) were found in 1960 during the construction of the bridge to Martinez. The projectiles were found and disposed of in an area between Building 7 and warehouses W7 and W8. The projectiles were placed in a trench approximately 10 feet deep. The cylinders were laid in the trench and then burned using Thermit grenades and charges. The charges were used to puncture the projectiles to render them safe and the Thermit grenades were used to burn off the mustard gas (Thermit burns at 1,500 degrees Fahrenheit). The decontaminated projectiles were left in place. Records do not indicate whether explosive ordnance disposal (EOD) personnel cleared the site. Due to the major transformations that have taken place at the Exxon refinery, neither Mr. Bailey, nor Mr. Putnam was able to identify the exact location of the disposal site(s). These disposal sites are considered as one.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

PA Summary

DoD Site #

Chemical Warfare Disposal

Area: M

COMMENTS

This site was not included in the Archives Search or Archive Search Supplement Reports (ref 1108 and 1109). No prior EOD activities are known. Further research into the location of this suspected site has determined that it was located within the Valero Refinery. A 2001 map of the facility indicates an approximate 340,000 sq ft pond and several other large retention ponds are now in the area of the suspected chemical warfare disposal site. Therefore, the suspected site has been demolished.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Concrete lined underground tank
 Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address	
CAL TRANS Right-of-Way	STATE OF CALIFORNIA		
Year Bldg. Built	Pre 1958	Year Bldg. Removed	1970s
		Site Area (SqFt)	2044
Current Land Use	Hwy		

OPERATIONAL HISTORY

DoD Use Type

UST

DoD Uses

Suspected Water Storage

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Concrete

Disposal Information

None Listed

Activities (inside/outside)

Inside Tank

Records Research Report Addenda Data

A concrete-lined underground tank 30 feet in diameter, located approximately 50 feet west of the northern side of Magazine 14, was identified on two drawings dated 21 October 1958 (one shows roads, railroads, and structures (ref 376) and one shows utilities (ref 398)).

Records Research Report Comments

ENVIRONMENTAL SUMMARY

Vessel Inventory

Vessel #	Type	Original Owner	Size (Gal)	Construction	Commodity Stored	Date Installed	Date Removed	Post-Army	Installed Post-Army
1	UST	US Army	0	Concrete	Unknown (likely water)	Pre 1958	Unknown	No	<input type="checkbox"/>

Uses: Unknown (likely water storage)

Comments: Located in the area of the Benicia-Martinez Bridge Toll Plaza. Located approximately 50 feet west of the northern side of Magazine 14 (currently the Office for the Benicia-Martinez Toll Bridge Authority). Not present.

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Brown and Caldwell concluded that the 30-foot diameter concrete tank does not currently exist and it may not have ever been built. There is no evidence in the Arsenal's records of its use, nor was there evidence of this tank during a field inspection of the

PA Summary

DoD Site #

Concrete lined underground tank

Area: M

area west of former Magazine 14. It is presumed that the tank, if it was ever built, was filled or destroyed during various construction phases for the Interstate 680/780 bridge abutments. However, we were unable to find conclusive evidence that confirms the destruction of this tank.

Various documents from the RRR were reviewed (reference numbers 267, 376, 542, 650, 653, and 718) for evidence of the construction or destruction of a 30-foot diameter concrete-lined tank near Magazine 14. These documents are inconclusive. Document 176 from the RRR lists of buildings and structures at the former Arsenal as of 1 January 1957. The concrete lined tank is not listed in this document, and it was not identified as any type of fuel storage tank. No evidence of the existence of a 30-foot diameter tank was found on any of the available aerial photographs from the RRR.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Drainage Canal

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-110-120	VALERO REFINING COMPANY CALIF	3400 PARK ROAD
0080-270-020	CALIFORNIA STATE	
0080-270-030	CALIFORNIA STATE	
0080-270-050	BENICIA INDUSTRIES INC	
0080-270-070	BENICIA INDUSTRIES INC	

Year Bldg. Built 1942 Year Bldg. Removed Not applicable Site Area (SqFt) 137149

Current Land Use Industrial-General; Industrial-Waterfront

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Tidewater and Flood Control/Domestic Waste Collection

Secondary DoD Uses

Unknown

Post-Army Uses

Storm water runoff from the Exxon refinery.

Flooring

None until mid-1940s, when concrete was installed

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

An unknown amount of storm water containing benzene was spilled into the canal on 29 April 1991. Another documented spill on 8 December 1992 released one gallon of lubricating oil into the canal. On 21 January 1992 and 2 March 1994, two oil spills of unknown extent discharged into the drainage canal.

Records Research Report Comments

Drainage canal extends inland 9,200 feet from Suisun Bay (at the boundary between Area M and Area W) along the northeast boundary of Area M, and north into Area R. The canal was originally unlined, and was referred to as Sulfur Springs Creek. It was lined with concrete in the mid-1940s, and has been referred to as the drainage canal since that time. In addition to providing tide and flood control, the canal received domestic waste just south of Tidal Gate 1 from sewer lines originating at Building 155 (Tire Rebuild Shop), W7, and W8 (ref 405). At one time, the canal was also fed by nineteen 6-foot-wide laterals. The Exxon refinery was built along the upper reaches of the canal. There are multiple landowners through whose property the drainage canal extends.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

PA Summary

DoD Site #

Drainage Canal

Area: M

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Dunnage Burn Area

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-140-030	HEARTHSTONE PROP BENICIA LLC				
Year Bldg. Built	Pre-1943	Year Bldg. Removed	Pre-1945	Site Area (SqFt)	100633
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Burning of Scrap Wood

Secondary DoD Uses

Unknown

Post-Army Uses

Paved parking lot used by Toyota Motor Sales Co. for vehicle storage (ref 544).

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

13-acre area, called Area 8 in the 1997 USACE Archives Search Report, was dedicated to the burning of dunnage (ref 544). The Dunnage Burn Area does not appear on a 1945 map (ref 650).

Records Research Report Comments

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This area was used to burn dunnage (loose materials used to support and protect cargo in a ship's hold; also padding in a shipping container). The site has been developed. There are no records indicating any potential environmental concerns at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Fillsite 3 (formerly the Dumpsite)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
CAL TRANS Right-of-Way	STATE OF CALIFORNIA				
Year Bldg. Built	1951	Year Bldg. Removed	Not applicable	Site Area (SqFt)	12972
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Tire Rebuild Facility

DoD Uses

Dumpsite

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

Dumpsite created in 1951 to consolidate tire storage areas and remove stored tires from Building 155 (ref 13). In 1951, dumpsite received 684 cubic yards of solid waste and 1601 cubic yards of fill.

Records Research Report Comments

Later paved for storing tires in the open.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

Site was known to accept solid waste and for the open storage of tires.

RECOMMENDATIONS

Additional investigation is recommended to determine the presence or absence of fuels, solvents, and oils in groundwater downgradient of the site for a possible release from waste discharged at this site.

PA Summary

DoD Site

Ordnance Disposal Site

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Post 1949	Site Area (SqFt)	121996
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Ordnance Disposal Site

Secondary DoD Uses

Unknown

Post-Army Uses

Open Storage

Flooring

Asphalt (currently)

Disposal Information

None identified

Activities (inside/outside)

None identified beyond this site.

Records Research Report Addenda Data

According to the Benicia Arsenal Historical Summary for 2 September 1945 to 1 July 1951, 6 or 7 tons of buried ammunition were found in 1949 and deactivated by the Arsenal Surveillance Group. In addition, small caliber shells, small bombs, and rusted hand grenades were found. It was determined that this ammunition had been buried after the 1922 fire (ref 232). Records do not indicate whether EOD personnel cleared the site.

Records Research Report Comments

Mr. Bailey identified the general location of OS25, northeast of Pine Lake, as a former ammunition disposal area (Bailey, 1997). According to Mr. Bailey, while leveling a hill at OS25 and placing the fill at OS25A in 1949, he and his coworkers unearthed live ammunition. Mr. Bailey thought that the ammunition may have originated in OS25 and been transported to OS25A by the excavation equipment. A team from the 6th Army was dispatched to the Arsenal to investigate the site.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

SI

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

There are no HTRW related issues for this site and therefore no DoD action is recommended.

PA Summary

DoD Site #

OS14

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-140-060	BENICIA CITY	
0080-140-080	VALERO REFINING COMPANY CALIF	
0080-140-480	BENICIA INDUSTRIES INC	

Year Bldg. Built Year Bldg. Removed Site Area (SqFt)

Current Land Use

OPERATIONAL HISTORY

DoD Use Type

DoD Uses

Secondary DoD Uses

Post-Army Uses

Flooring

Disposal Information

Activities (inside/outside)

Records Research Report Addenda Data

Records Research Report Comments

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

COMMENTS

RECOMMENDATIONS

PA Summary

DoD Site #

OS15
Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-140-040	HEARTHSTONE PROP BENICIA LLC	1 OAK ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Not applicable	Site Area (SqFt)	13168
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage

Secondary DoD Uses

Unknown

Post-Army Uses

Currently used for temporary parking of imported automobiles arriving by sea. Benicia Industries, Inc., is the current landowner for OS15.

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

OS15 appears on a 1954 map (ref 646).

Records Research Report Comments

Beneficial use

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS16

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-140-040	HEARTHSTONE PROP BENICIA LLC	1 OAK ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Not applicable	Site Area (SqFt)	584384
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage

Secondary DoD Uses

Unknown

Post-Army Uses

Currently used for temporary parking of imported automobiles arriving by sea. OS14 and OS16 are currently owned by Toyota Motor Sales.

Flooring

Asphalt (in part; currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

OS16 appears on a 1954 map (ref 646).

Records Research Report Comments

Beneficial use. Located in the southern portion of Area M.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS17

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Not applicable	Site Area (SqFt)	39874
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage

Secondary DoD Uses

Unknown

Post-Army Uses

General parking for Buildings 75, 76, and 94.

Flooring

Soil

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

OS17 appears on a 1954 map (ref 646).

Records Research Report Comments

Located south of Sandstone Quarry 1, and was used for general parking.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS20

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-120-140	BENICIA INDUSTRIES INC	
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD

Year Bldg. Built	Unknown	Year Bldg. Removed	Not applicable	Site Area (SqFt)	388052
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage, Maintenance, Civilian Parking

Secondary DoD Uses

Unknown

Post-Army Uses

Continues to function as vehicle parking lots and is owned by Benicia Industries, Inc.

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

A 1962 Building Zone list described OS20 as a parking lot for wheeled vehicles with two approximate vacate dates of December 1962 and March 1964 (ref 713).

Records Research Report Comments

Beneficial use. Situated adjacent to the Motor Pool, were used for vehicle storage and possible outdoor maintenance activities (ref 713).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS21

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-210	BENICIA INDUSTRIES INC	1997 ELM ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Not applicable	Site Area (SqFt)	74102
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage, Maintenance

Secondary DoD Uses

Unknown

Post-Army Uses

Continues to function as vehicle parking lots and is owned by Benicia Industries, Inc.

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

Beneficial use. Situated adjacent to the Motor Pool, were used for vehicle storage and possible outdoor maintenance activities (ref 713).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS24

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Not applicable	Site Area (SqFt)	146383
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage

Secondary DoD Uses

Unknown

Post-Army Uses

Continues to function as vehicle parking lots and is owned by Benicia Industries, Inc.

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

OS24 was used for vehicle storage and outdoor maintenance activities (ref 713).

Records Research Report Comments

Beneficial use. Situated adjacent to the Motor Pool, were used for vehicle storage and possible outdoor maintenance activities (ref 713). In 1965, three sites in Area M were designated for the disposal of excavation material from highway construction (ref 464). Grading and construction of the Exxon tract and the disposal of excavation materials may have either removed traces of explosive residues, or covered with fill any surficial residue from the days of Army operations. One of the soil disposal areas was located in OS29. The other two areas were located adjacent to Hill Road (Park Road) near OS24 and OS25 (ref 464).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS25

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Not applicable	Site Area (SqFt)	279406
Current Land Use	Industrial-Limited				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage - Ordnance Disposal Site

Secondary DoD Uses

Unknown

Post-Army Uses

Current use of OS25 is general vehicle parking. Benicia Industries, Inc., is the current landowner for OS25.

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

Located next to the Motor Pool, was utilized for vehicle storage and outdoor maintenance activities (ref 713). OS25 has been identified by former Arsenal employee, Mr. Bailey as the earlier location of an Ordnance Disposal Site. An Arsenal Historical Summary stated that 6 or 7 tons of buried ammunition were found at OS25 in 1949 and deactivated by the Arsenal Surveillance Group. In 1965, three sites in Area M were designated for the disposal of excavation material from highway construction (ref 464). Grading and construction of the Exxon tract and the disposal of excavation materials may have either removed traces of explosive residues, or covered with fill any surficial residue from the days of Army operations. One of the soil disposal areas was located in OS29. The other two areas were located adjacent to Hill Road near OS24 and OS25 (ref 464).

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS25A

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-120-010	VALERO REFINING COMPANY CALIF	
0080-120-190	BENICIA INDUSTRIES INC	2283 CAMEL ROAD
0080-120-220	BENICIA INDUSTRIES INC	2024 CAMEL ROAD

Year Bldg. Built 1922; post-1945; 194 Year Bldg. Removed Not applicable Site Area (SqFt) 356180

Current Land Use Industrial-General; Industrial-Limited

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Storage of NIKE Test Equipment

Secondary DoD Uses

Unknown

Post-Army Uses

Current use of OS25(A) is general vehicle parking. Benicia Industries, Inc., is the current landowner.

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

None Listed

Records Research Report Comments

OS25A was used for storage of NIKE test equipment, with a proposed site vacate date of December 1962 (ref 713). Former Arsenal employee, Mr. Bailey, stated that fill dirt from an excavation project at OS25 was placed at OS25A. Ammunition was uncovered during the excavation at OS25. It is unclear if the fill dirt placed at OS25A contained any of the ammunition from OS25. A team from the 6th Army was sent out to investigate the site.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This site was also investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text. There are no further records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS27

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-130-090		
0080-130-100		

Year Bldg. Built Year Bldg. Removed Site Area (SqFt)

Current Land Use

OPERATIONAL HISTORY

DoD Use Type

DoD Uses

Secondary DoD Uses

Post-Army Uses

Flooring

Disposal Information

Activities (inside/outside)

Records Research Report Addenda Data

Records Research Report Comments

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

COMMENTS

RECOMMENDATIONS

PA Summary

DoD Site #

OS28

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-340-040	FLEETVIEW PARK LLC	2991 BAYSHORE ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Post 1966	Site Area (SqFt)	197676
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage, Vehicle and Equipment Storage and Maintenance

Secondary DoD Uses

Unknown

Post-Army Uses

1965 and 1966 by Waste Refinement Company to reclaim lead from tetraethyl lead (TEL) sludge.

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

Parcel 2-4a was used in 1965 and 1966 by Waste Refinement Company to reclaim lead from tetraethyl lead (TEL) sludge. The sludge was spread to dry at the southeast corner of the site, then mixed with coke and sawdust and sintered in a traveling hearth furnace. This operation continued until 1966 when it was ceased, pursuant to directives from the Solano County Department of Health. Cleanup activities were conducted in 1967 and again in 1970. They included dismantling the smelter and removing several hundred cubic yards of TEL sludge from the site. An investigation by HLA in 1986 and 1987 found elevated concentrations of lead in the soil. Concentrations exceeding 1,000 mg/kg were reported as deep as 4 feet below ground surface (bgs). (In Feb. '91, Shareholder Properties, Ltd. submitted work plan to 1) excavate lead-containing soil and asphalt from areas where lead concentrations exceed remediation levels, 2) stabilize them with silicate-based additives to reduce the solubility of the lead, 3) cap the stabilized soil and asphalt on site, and 4) grade the site to improve its configuration and increase useable area. Soil remediation levels were <1,000 ppm for total lead & <13 ppm for organic lead. Treatment criteria include an extractable lead concentration of 5 mg/l and a pH range of 8.0 to 12.0. (ref 1181)). In May 1992, approximately 140 to 175 cubic yards of soil containing elevated concentrations of lead were relocated to the pavement at the southern end of the Parcel 2-4a property (ref 526). The current status with the local regulatory agency, Solano County Department of Environmental Management, is unknown.

Records Research Report Comments

Located south of Building 155 and was used for vehicle and equipment storage and maintenance. OS28 has been identified as Parcel 2-4a since Arsenal closure.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

RIFS

PA Summary

DoD Site #

OS28

Area: M

COMMENTS

Soil removal activities has taken place as part of post Army use. Any DoD related activities that may have been associated with this site are no longer present.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS29

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-110-080	SOUTHERN PACIFIC CO	
0080-130-090		
0080-340-060	RUSZEL JOHN P II	2980 BAYSHORE ROAD
0080-340-110	BAYSHORE ASSOCIATES	3110 BAYSHORE ROAD
0080-340-130	SWB ASSOCIATES	3150 BAYSHORE ROAD
0080-340-140	IRON WORKERS UNION LOCAL	3120 BAYSHORE ROAD
0080-340-150	IRON WORKERS UNION LOCAL	3130 BAYSHORE ROAD
0080-340-160	PONDEROSA PROPERTIES II	3000 BAYSHORE ROAD
0080-340-170	PONDEROSA PROPERTIES II	2990 BAYSHORE ROAD

Year Bldg. Built **Year Bldg. Removed** **Site Area (SqFt)**

Current Land Use

OPERATIONAL HISTORY

DoD Use Type

DoD Uses

Secondary DoD Uses

Post-Army Uses

Flooring

Disposal Information

Activities (inside/outside)

Records Research Report Addenda Data

Records Research Report Comments

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

PA Summary

DoD Site #

OS29

Area: M

COMMENTS

A summary of the investigations performed at Gould's Pro Shop facility, located near former W8, is included herein due to its proximity and potential to impact the area occupied by OS29. Gould's facility is used for the repair of rotating equipment, pumps, and valves. Investigation began as a result of an anonymous phone call to EPA which claimed that Gould's operations were impacting Suisun Bay marshlands and streams. The caller claimed that the contents of the pumps under repair were poured into a broken on-site sump and that waste oils, acids, and solvents leak out into the bay. The caller also claimed that lead-contaminated sand piles were located adjacent to the shore of the bay and were not covered. According to Gould's, available file information and this PA, there is no evidence of past spills or any releases of hazardous materials. Note that the facility has a solvent tank, a degreasing pit, a sump, a sand blast booth, and a waste storage area, all located outdoors in the yard. Samples of sandblast waste sand tested for metals yielded results below TCLP limits. Groundwater in this region is heavily salinated, and is not used as a source of drinking water or irrigation. No groundwater sampling has been conducted at this site. The potential for a release of hazardous substances to surface water from the site appears to be low (ref 1183). Status of this site is unknown. Disposal practices are unknown. Based on the post closure activities, the site has been significantly altered due to the excavation activities and possible impacts due to existing businesses.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS30

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-080-200	ESPINOSA ALEX & ANN L	3190 BAYSHORE ROAD
0080-080-730	ESPINOSA ALEX & ANN L	

Year Bldg. Built Year Bldg. Removed Site Area (SqFt)

Current Land Use

OPERATIONAL HISTORY

DoD Use Type

DoD Uses

Secondary DoD Uses

Post-Army Uses

Flooring

Disposal Information

Activities (inside/outside)

Records Research Report Addenda Data

Records Research Report Comments

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

COMMENTS

RECOMMENDATIONS

PA Summary

DoD Site #

OS31

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address			
0080-230-100	GIORDANO NUNZIO	3190 PARK ROAD			
Year Bldg. Built	Unknown	Year Bldg. Removed	Unknown	Site Area (SqFt)	22897
Current Land Use	Industrial-General				

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage

Secondary DoD Uses

Unknown

Post-Army Uses

Industrial Warehouse Development

Flooring

Asphalt (in part; currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

None Identified

Records Research Report Comments

Beneficial use

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

OS46(A)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-110-080	SOUTHERN PACIFIC CO	
0080-340-010	KOERNER NORMAN & BETTY	3101 BAYSHORE ROAD
0080-340-020	KOERNER NORMAN D & BETTY L	3001 BAYSHORE ROAD
0080-340-030	TUTTLE MARSHALL	2995 BAYSHORE ROAD

Year Bldg. Built Year Bldg. Removed Site Area (SqFt)

Current Land Use

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Open Storage

Secondary DoD Uses

Unknown

Post-Army Uses

Parking lot. Records Research does not indicate what the parking lot is next to or who uses the parking lot. Benicia Industries, Inc. is the current property owner.

Flooring

Asphalt (in part; currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

None Identified

Records Research Report Comments

Beneficial use. Used for tire storage during Arsenal operations.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

There are no records indicating any potential environmental concerns related to DoD activities at this site.

RECOMMENDATIONS

No DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Popping pot (formerly the Incinerator)

Area: M

NDAI FAR IRR Potential OE

SITE DESCRIPTION

Parcel # (APN)	Owner Name	Site Address
0080-120-010	VALERO REFINING COMPANY CALIF	
CAL TRANS Right-of-Way	STATE OF CALIFORNIA	

Year Bldg. Built Unknown **Year Bldg. Removed** Not applicable **Site Area (SqFt)** 121996

Current Land Use Industrial-General

OPERATIONAL HISTORY

DoD Use Type

Disposal Areas

DoD Uses

Incineration

Secondary DoD Uses

Unknown

Post-Army Uses

None Identified

Flooring

Soil

Disposal Information

None Identified

Activities (inside/outside)

Unknown

Records Research Report Addenda Data

A Utility map for the Interstate 680 Benicia-Martinez bridge on-ramp construction, dated October 1958, shows an incinerator adjacent to Quarry 2 (ref 720).

Records Research Report Comments

No other information about an incinerator in this area was found during the records research.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

This has also been called the Armored Fighting Vehicle (AFV) by the USACE. Currently, the area is part of the Benicia-Martinez Bridge Expansion project. The AFV is a World War II era General Grant type tank that was gutted then modified for use as a "popping pot" to destroy unserviceable ordnance. The tank turret was removed and the tank hull was modified to be used as a furnace. A conveyor belt was constructed to feed ordnance to the furnace and a small fuel line supplied diesel fuel to keep the furnace burning. The diesel fuel was likely supplied by a nearby above ground tank a short distance up hill from the AFV. Popping pot operations were periodically stopped and the burned debris dumped into a burial pit near the tank body. In November 2002, the AFV is buried with approximately 8 feet of fill material because of the construction activities in the area. This site was investigated as part of an Arsenal-wide OE investigation and removal effort conducted by USACE in 2001 (ref 1138). See Section 2 of the PA text. There are HTRW related issues for this site in regards to the burial pit.

PA Summary

DoD Site #

Popping pot (formerly the Incinerator)

Area: M

RECOMMENDATIONS

Additional investigation is recommended to determine the presence or absence of fuels, explosives, metals and oils in groundwater downgradient of the site for a possible release from waste disposed of from the popping pot.