

# 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          |
| Current Land Use | Public       | Site Area (SqFt)   |
|                  |              | 332                |

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**

|                        |                     |                     |
|------------------------|---------------------|---------------------|
| <b>Parcel # (APN)</b>  | <b>Owner Name</b>   | <b>Site Address</b> |
| CAL TRANS Right-of-Way | STATE OF CALIFORNIA |                     |

|                         |          |                           |       |                         |      |
|-------------------------|----------|---------------------------|-------|-------------------------|------|
| <b>Year Bldg. Built</b> | Pre 1958 | <b>Year Bldg. Removed</b> | 1970s | <b>Site Area (SqFt)</b> | 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

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 is currently owned by Toyota Motor Sales.

### Flooring

Asphalt (currently)

### Disposal Information

None Listed

### Activities (inside/outside)

Outside

### Records Research Report Addenda Data

OS14 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 #

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  Year Bldg. Removed  Site Area (SqFt)

Current Land Use

### 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

Storage Areas

DoD Uses

Open Storage

Secondary DoD Uses

Unknown

Post-Army Uses

According to Records Research OS27 has been used for open storage following Arsenal closure. (Open storage items unknown).

Flooring

Asphalt (currently)

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

The 1962 Building Zone list identified OS27 as a Post Dump Area (see Post Dumpsite) with a planned vacate date of March 1964 (ref 713).

Records Research Report Comments

Located on the high (western) edge of the tidal flats, east of the railroad tracks.

## ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

## COMMENTS

See comments for the Post Dumpsite.

## RECOMMENDATIONS

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

## 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

Area was used by Associated Metals Co. for processing scrap iron and steel. The area was later used as a dumpsite for freeway construction spoils (ref 464).

#### Flooring

#### Disposal Information

#### Activities (inside/outside)

#### Records Research Report Addenda Data

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 OS areas 24 and 25 (ref 464).

#### Records Research Report Comments

Located across the Southern Pacific railroad tracks from Building 155, was a paved yard used to store industrial waste delivered in 55-gallon drums from shop buildings. Beneficial use. It is currently paved and lies within the Benicia Industrial Park.

### 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.

## PA Summary

DoD Site #

Post Dumpsite (formerly Landfill 3)

Area: M

NDAI  FAR  IRR  Potential OE

### SITE DESCRIPTION

| Parcel # (APN) | Owner Name   | Site Address       |
|----------------|--------------|--------------------|
| 0080-130-040   | BENICIA CITY | 1158 BAYSHORE ROAD |
| 0080-130-060   | BENICIA CITY |                    |
| 0080-130-090   |              |                    |
| 0080-130-100   |              |                    |

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

Current Land Use

### OPERATIONAL HISTORY

#### DoD Use Type

Disposal Areas

#### DoD Uses

Dumpsite

#### Secondary DoD Uses

Currently used a storage area for cars

#### Post-Army Uses

Humble Oil was given permission in 1968 to use the north end of Area M for the deposit of dredging and construction spoils. Currently used by Toyota Motor Sales Co. for open storage of imported vehicles (ref 544).

#### Flooring

Asphalt (currently)

#### Disposal Information

The Post Dumpsite (formerly Landfill 3) was a disposal area from approximately 1954 to 1961 for metal cleaning corrosives that also contained residual quantities of heavy metals.

#### Activities (inside/outside)

Outside

#### Records Research Report Addenda Data

An interview with a former Arsenal employee indicates that this area also received drums of industrial waste including acids, metal-cleaning corrosives, DDT, high-octane gasoline, and every type of waste generated at the Arsenal (ref 1000). According to the 1961 Facility Data Sheet, "metal cleaning coorosives from tanks" were "disposed of in filled land area." (ref 196).

#### Records Research Report Comments

The landfill was reportedly in operation from 1954 through 1961, located near Suisun Bay. A graded outline in aerial photographs consists of 20 acres. It is suspected that the disposal and burning of scrap lumber associated with the Carpenter Shop facilities in Area I, and pilings and other waste material from repairs made to the Arsenal Wharf (ref 155) were placed at landfill. Thousands of gallons of gasoline were reportedly burned in the landfill pits (Bailey, 1997). Based on aerial photographs, a large area at the north end of the site, that extends north to the drainage canal, and identified as the Area 10 Dump Site in the 1997 USACE Archives Search Report (ref 544), does not appear to have been used for landfill purposes. According to the aerial photographs, only a graded area. Circular pits are shown on a 1952 aerial photograph and may represent burn pits. The graded area extends to what was identified as Area 10 but does not include it. The area (including much of the area identified as Area 10) was then referred to as Spoils Area 3 (ref 439). Area is now largely paved, with several buildings constructed over the former fill area.

### ENVIRONMENTAL SUMMARY

## PA Summary

### DoD Site #

Post Dumpsite (formerly Landfill 3)

Area: M

### Furthest Stage of Environmental Investigation

NONE

### COMMENTS

Additional research was conducted by Brown and Caldwell to determine if the current landowner ever encountered any refuse materials in the area of a suspected landfill, also known as Area 7 and Open Storage (OS) Area 27. Brown and Caldwell interviewed the current landowner, Benicia Industries (BII) and a former employee, Mr. Don Heinitz. Mr. Heinitz was an engineer with BII for over 20 years. He also worked in the Benicia area for PG&E prior to working for BII. He was the engineer for road construction and was also involved with installing utility poles as well as digging ditches. Mr. Heinitz never encountered any refuse during any excavation for repair of utilities or utility pole installation in this area. He did encounter timbers at approximately 3 to 4 feet below grade that are placed on top of the former clayey marsh with fill placed on top of the timbers. According to the USACE, this was common practice. Both Mr. Heinitz and the current landowner state that water beneath this area rises and falls with the tide. Based on the lack of credible evidence of any landfilling operations, this area was not used as a landfill. There are circular pits shown on aerial photos that may have been the location of reported burn pits. Further analysis was performed to try to accurately depict the information available for this area. The information recorded in historical documents and interviews about this area is listed below in chronological order:

- 1928 aerial photograph (RRR, Appendix A-2): The area is undisturbed marshlands.
  - 1945 aerial photograph (RRR, Appendix A-2): The area is partially filled in (closest to the railroad trestle crossing the Carquinez Strait). Dumping is not apparent.
  - September 7, 1945 Arsenal Map (RRR, ref 650): There are no structures or activity noted on this map in this area.
  - 1947 aerial photograph (RRR, Appendix A-2): Entire area is disturbed and filled. No other activity present. The activity seen on the 1945 aerial photo is not present.
  - 1950s (exact date unknown): Benicia Bomber article describing money-saving operations by the Arsenal Carpenter Shop states "small unusable lumber scraps are hauled to the sanitary fill on the bay shore road for open burning." (RRR, ref 155, pg 5).
  - 1952, 1957, 1959, and 1962 aerial photographs (RRR, Appendix A-2): The first occurrence of OS27 (paved area with unknown materials neatly stored). Two black circular areas are present at the north end of the site. These may be the burn pits mentioned in the Mr. Leroy Bailey interview (see below) and referenced as the areas of open burning in the Benicia Bomber article. Dumping is not apparent. The area surrounding Open Storage Area 27 is filled in for access. The filled area reaches near the Carquinez Strait in some places.
  - September 7, 1954: General Map. "Post Dump" marked on map as "27-A" south of "27" and adjacent to temporary building "T-227" (RRR, ref 646). The numbers refer to "Open Surfaced Areas". Some of them are also known as Open Storage (OS) Areas. For example, OS27.
  - May 10, 1961: Facility Data states "Metal cleaning corrosives removed from tanks and disposed of in filled land area" (RRR, ref 196, pg 9).
  - 1973 aerial photograph (RRR, Appendix A-2): Army gone, area defined by dirt roads, circular areas not present.
  - 1978 aerial photograph (RRR, Appendix A-2): Area completely paved.
  - 1997 Mr. James Milburn Interview: Mr. Milburn, a former Arsenal employee from 1941 to 1963 stated: "After the clocktower dumpsite was closed (Fillsite 2), a larger dumpsite was opened near the bay. It was used from the late 1940s until 1962." (Archive Search Report Supplemental, USACE, 1997).
  - 1997 Mr. Leroy Bailey Interview (not found, text below from RRR, pg 2M-17): Mr. Bailey, former Arsenal employee, indicated that this area received industrial waste including acids, metal-cleaning corrosives, DDT, high-octane gasoline, and every type of waste generated at the Arsenal. He also indicates that thousands of gallons of gasoline was burned in pits.
  - 2003 Mr. Don Heinitz Interview: Mr. Heinitz, former chief engineer for Benicia Industries, Inc. for 20 years, never encountered any refuse during any excavation to repair or install utilities in this area. Wood timbers were found.
- In summary, the area was a dumpsite from approximately 1954 to 1961 for metal cleaning corrosives that also contained residual quantities of heavy metals. At the north end of the area, burning of wood was also performed in two circular pits during the same time frame.

### RECOMMENDATIONS

Because there is evidence that the area received discharge of liquid metal cleaning corrosives, USACE proposes to investigate this site.

# PA Summary

DoD Site #

Primer Destruction area M

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 | 1943                   | Year Bldg. Removed | 1960's | Site Area (SqFt) | 14552 |
| Current Land Use | Industrial-Limited     |                    |        |                  |       |

## OPERATIONAL HISTORY

### DoD Use Type

Disposal Areas

### DoD Uses

Primer Destruction

### Secondary DoD Uses

Unknown

### Post-Army Uses

None Identified

### Flooring

Soil

### Disposal Information

None Listed

### Activities (inside/outside)

Inside and Outside

### Records Research Report Addenda Data

Mr. Jim Milburn, a former Arsenal employee, identified a metal building in the vicinity of Primer Destruction Area M. The metal building had a conveyor belt that led to a tank (see the Incinerator). Primers were pulled and placed on the conveyor belt which dropped them into the tank. An oil burner attached to the tank was left running constantly to ignite the primers. The corrugated metal building was removed during the Interstate 680 construction (ref 718).

### Records Research Report Comments

Mr. Milburn speculated that once the tank was filled with ashes, the ashes were dumped in the landfill. The location of the landfill or correlation to one of the fillsites is unknown. None of the primer destruction structures remain.

## 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 #

Quarry 1

Area: M

NDAI  FAR  IRR  Potential OE

## SITE DESCRIPTION

| Parcel # (APN) | Owner Name             | Site Address    |
|----------------|------------------------|-----------------|
| 0080-120-220   | BENICIA INDUSTRIES INC | 2024 CAMEL ROAD |
| 0080-120-230   | BENICIA CITY           | 2090 CAMEL 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

## COMMENTS

## RECOMMENDATIONS

PA Summary

DoD Site #

Quarry 2

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 1894

Year Bldg. Removed

1970s

Site Area (SqFt)

75283

Current Land Use

Hwy

OPERATIONAL HISTORY

DoD Use Type

Fillsites and Quarries

DoD Uses

Primer Destruction

Secondary DoD Uses

None Listed

Post-Army Uses

Right-of-way easement for CalTrans.

Flooring

Soil and Bedrock

Disposal Information

None Listed

Activities (inside/outside)

Outside

Records Research Report Addenda Data

Based on the 1894 map (ref 653), the largest Arsenal sandstone quarry, Quarry 2, was located on the bluffs overlooking Suisun Bay, about 750 feet north of Magazine 14. The area is presently located on the eastern section of the Interstate 680/780 interchange.

Records Research Report Comments

Later filled in and used as a primer destruction area (Primer Destruction Area 2). Primer Destruction Area 2 also included Buildings 96, 97, 109, 147, and 148.

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. This area is also part of the Benicia-Martinez Bridge Expansion Project.

RECOMMENDATIONS

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

## PA Summary

DoD Site #

R1

Area: M

NDAI    FAR    IRR    Potential OE

### SITE DESCRIPTION

| Parcel # (APN)   | Owner Name   | Site Address       |
|------------------|--------------|--------------------|
| 0080-140-670     | BENICIA CITY |                    |
| Year Bldg. Built | 1881         | Year Bldg. Removed |
|                  |              | Post 1978          |
| Current Land Use | Public       | Site Area (SqFt)   |
|                  |              | 20625              |

### OPERATIONAL HISTORY

#### DoD Use Type

Water Supply and Wastewater

#### DoD Uses

Fire-Fighting Water Reservoir

#### Secondary DoD Uses

Reservoir

#### Post-Army Uses

City of Benicia

#### Flooring

Unknown

#### Disposal Information

None Identified

#### Activities (inside/outside)

Outside

#### Records Research Report Addenda Data

System of cisterns and small reservoirs used to store rainwater evolved into a network of reservoirs. In 1940 Pine Lake (R4), an 86 million-gallon artificial lake, was created. By the 1950s, the network included five reservoirs, R1 through R5 (R5 was located in Area W.) In 1952, the Pine Lake dam was raised 8 feet, which increased its capacity from 86 million gallons to 135 million gallons (ref 190). In the latter half of 1952, approximately 12 million gallons of water from the reservoirs was filtered (ref 152). A public utility hookup to the Contra Costa Canal was completed in 1962 (ref 196).

#### Records Research Report Comments

Beneficial use. Reservoirs held water that was pumped in from the Suisun Bay and Carquinez Strait. During the spring season, runoff from the Sierra Nevada mountain range forced a heavy flow of fresh water into the Sacramento and San Joaquin Rivers. These rivers flow into Suisun Bay and the Carquinez Strait and push back the salt water (ref 190). During such periods, untreated fresh water from the bay was stored for fire-fighting and industrial uses. A treatment system was installed at R1, a 2,300,000 gallon reservoir (ref 407) south of Pine Lake (R4), to supply potable water. The treatment system included a filtration plant (Building 208); pump houses (Buildings 16[B], 17, and 19); a chlorination house (Building 203); piping; and a booster pump house (Building 112). R1 was a 2,300,000 gallon reservoir (ref 407). In 1952, a portion of the potable water supply at the Arsenal was purchased from the California Pacific Utilities Company (ref 405). The purchased water was derived from local storage reservoirs and from the city of Napa through a pipeline approximately 20 miles long (ref 405). Water stored in Pine Lake was filtered and chlorinated and used to augment the potable supply to reduce the quantity of water purchased (ref 405). In 1954, approximately 4 million gallons of potable water per month was used for domestic purposes. That supplied 3,200 assigned personnel, including post residents and employees. Approximately 7 million gallons of water per month was used for industrial purposes.

## PA Summary

DoD Site #

R1

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 | Reservoir | US Army        | 2336000     | Unknown      | Water            | 1881           | Unknown      | Unknown   | <input type="checkbox"/> |

Uses: Water Storage

Comments: Part of water treatment system for potable water.

#### 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 #

R2

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 | 1881 | Year Bldg. Removed | 1961 | Site Area (SqFt) | 12938 |
|------------------|------|--------------------|------|------------------|-------|

Current Land Use: Hwy

### OPERATIONAL HISTORY

#### DoD Use Type

Water Supply and Wastewater

#### DoD Uses

Potable Water Reservoir

#### Secondary DoD Uses

Reservoir

#### Post-Army Uses

Potential fillsite. Potable water treatment was performed by the City.

#### Flooring

Unknown

#### Disposal Information

None Identified

#### Activities (inside/outside)

Outside

#### Records Research Report Addenda Data

Reservoir R2 was removed in 1961 for the construction of Interstate 680. A 300,000 gallon steel tank was installed in its place for water storage (ref 718).

#### Records Research Report Comments

The transfer of property from the federal government to the City of Benicia, on 26 February 1965 (ref 457), provided for continued use of the potable water treatment system by the city.

### ENVIRONMENTAL SUMMARY

#### Vessel Inventory

| Vessel #   | Type              | Original Owner | Size (Gal.) | Construction | Commodity Stored | Date Installed | Date Removed | Post-Army       | Installed Post-Army      |
|--|-------------------|----------------|-------------|--------------|------------------|----------------|--------------|-----------------|--------------------------|
| 1  | Reservoir         | US Army        | 283500      | Unknown      | Water            | 1881           | 1961         | No              | <input type="checkbox"/> |
| Uses: Water Storage<br>Comments: Reservoir R2 was removed in 1961 for the construction of Freeway 680 (ref 718). |                   |                |             |              |                  |                |              |                 |                          |
| 2  | Water Supply Tank | US Army        | 300000      | Steel        | Water            | 1961           | Unknown      | City of Benicia | <input type="checkbox"/> |
| Uses: Water Storage<br>Comments: Tank replaced reservoir R2. The tank is no longer present.                      |                   |                |             |              |                  |                |              |                 |                          |

#### Furthest Stage of Environmental Investigation

NONE

## PA Summary

DoD Site #

R2

Area: M

### COMMENTS

The area is the current area of construction for the expansion of the Benicia-Martinez Bridge. The tank is no longer present. 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 #

R3

Area: M

NDAI    FAR    IRR    Potential OE

### SITE DESCRIPTION

|                         |                               |                           |           |
|-------------------------|-------------------------------|---------------------------|-----------|
| <b>Parcel # (APN)</b>   | <b>Owner Name</b>             | <b>Site Address</b>       |           |
| 0080-230-160            | BAY VISTA BSN PARK OWNERSASSN |                           |           |
| <b>Year Bldg. Built</b> | 1944                          | <b>Year Bldg. Removed</b> | 1973-1996 |
| <b>Site Area (SqFt)</b> | 12348                         |                           |           |
| <b>Current Land Use</b> | Industrial-General            |                           |           |

### OPERATIONAL HISTORY

**DoD Use Type**

Water Supply and Wastewater

**DoD Uses**

Fire-fighting Water Reservoir

**Secondary DoD Uses**

Reservoir

**Post-Army Uses**

Records Research only indicates that the site has been developed.

**Flooring**

Unknown

**Disposal Information**

None Listed

**Activities (inside/outside)**

Outside

**Records Research Report Addenda Data**

By the 1950s, there was a network that included five reservoirs, R1 through R5. (R5 was located in Area W.) These reservoirs held water that was pumped in from the Suisun Bay and Carquinez Strait. During the spring season, runoff from the Sierra Nevada mountain range forced a heavy flow of fresh water into the Sacramento and San Joaquin Rivers. These rivers flow into Suisun Bay and the Carquinez Strait and push back the salt water (ref 190). During such periods, untreated fresh water from the bay was stored for fire-fighting and industrial uses.

**Records Research Report Comments**

Records Research indicates that R3 has been removed. (A 1932 General Map for the Benicia Arsenal shows another R3, located approximately 400 feet southwest of R1. (ref 651). This location is labeled "R3 per 1945". There was a pump house associated with the older R3. The building is 16(B). The 1957 inventory (ref 167) notes that the building was built in 1942. The building appears on the 1945 map but gone by 1958 (ref 637)).

### ENVIRONMENTAL SUMMARY

**Vessel Inventory**

| Vessel # | Type | Original Owner | Size (Gal) | Construction | Commodity Stored | Date      | Date     | Post-Army | Installed Post-Army      |
|----------|------|----------------|------------|--------------|------------------|-----------|----------|-----------|--------------------------|
|          |      |                |            |              |                  | Installed | Removed  |           |                          |
| 1        | UST  | US Army        | 15000      | Unknown      | Water            | Pre 1932  | Pre 1945 | No        | <input type="checkbox"/> |

Uses: Water Storage

Comments: Tank is no longer present. Tank was located along Park Road (at that time Hill Road) approximately 400 feet southwest of R1. Noted on figure as "R3 (pre 1945)"

## PA Summary

DoD Site #

R3

Area: M

### Vessel Inventory

| Vessel # | Type      | Original Owner | Size (Gal.) | Construction | Commodity Stored | Date Installed | Date Removed | Post-Army | Installed Post-Army      |
|----------|-----------|----------------|-------------|--------------|------------------|----------------|--------------|-----------|--------------------------|
| 2        | Reservoir | US Army        | 0           | Unknown      | Water            | 1944           | Unknown      | Unknown   | <input type="checkbox"/> |

Uses: Water Storage

Comments: Reservoir is no longer present.

### 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 #

R4

Area: M

NDAI    FAR    IRR    Potential OE

### SITE DESCRIPTION

|                         |                        |                           |           |
|-------------------------|------------------------|---------------------------|-----------|
| <b>Parcel # (APN)</b>   | <b>Owner Name</b>      | <b>Site Address</b>       |           |
| 0080-120-140            | BENICIA INDUSTRIES INC |                           |           |
| <b>Year Bldg. Built</b> | 1939                   | <b>Year Bldg. Removed</b> | Post 1975 |
| <b>Current Land Use</b> | Industrial-Limited     |                           |           |
|                         |                        | <b>Site Area (SqFt)</b>   | 697529    |

### OPERATIONAL HISTORY

**DoD Use Type**

Water Supply and Wastewater

**DoD Uses**

Fire-fighting Water Reservoir (Pine Lake)

**Secondary DoD Uses**

Reservoir

**Post-Army Uses**

City of Benicia. Pine Lake was transferred to Benicia Industries, Inc. in 1975 (ref 460), and was later drained and filled in.

**Flooring**

Unknown

**Disposal Information**

Unknown

**Activities (inside/outside)**

Outside

### Records Research Report Addenda Data

In 1940, Pine Lake (R4), an 86 million-gallon artificial lake, was created. By the 1950s, the network included five reservoirs, R1 through R5 (Figure 2.21). (R5 was located in Area W.) These reservoirs held water that was pumped in from the Suisun Bay and Carquinez Strait. During the spring season, runoff from the Sierra Nevada mountain range forced a heavy flow of fresh water into the Sacramento and San Joaquin Rivers. These rivers flow into Suisun Bay and the Carquinez Strait and push back the salt water (ref 190). During such periods, untreated fresh water from the bay was stored for fire-fighting and industrial uses

### Records Research Report Comments

Beneficial use. Water stored in Pine Lake was filtered and chlorinated and used to augment the potable supply to reduce the quantity of water purchased (ref 405). In 1954, approximately 4 million gallons of potable water per month was used for domestic purposes. Approximately 7 million gallons of water per month was used for industrial purposes. A public utility hookup to the Contra Costa Canal was completed in 1962 (ref 196). (A 1905 Map for the Benicia Arsenal shows another R4, as a tank and located approximately 400 feet west of Building 1. A 1945 map (ref 650) renamed the tank as Building 114. As of 1954, the tank is no longer present. This location is labeled "R4 pre 1954").

### 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        | 50000       | Unknown      | Water            | Pre 1905       | Pre 1954     | No        | <input type="checkbox"/> |

Uses: Water Storage

Comments: A 1905 Map for the Benicia Arsenal shows another R4, located approximately 400 feet west of Building 1. Labeled as "R4 Pre 1954"

## PA Summary

DoD Site #

R4

Area: M

### Vessel Inventory

| Vessel # | Type      | Original Owner | Size (Gal) | Construction   | Commodity Stored | Date Installed | Date Removed | Post-Army       | Installed Post-Army      |
|----------|-----------|----------------|------------|----------------|------------------|----------------|--------------|-----------------|--------------------------|
| 2        | Reservoir | US Army        | 86000000   | Earth-rock dam | Water            | 1939           | 1975         | City of Benicia | <input type="checkbox"/> |

Uses: Water Storage

Comments: Also known as Pine Lake, it was drained and filled in.

### Furthest Stage of Environmental Investigation

NONE

### COMMENTS

The site was a former staging area for the Benicia-Martinez Bridge Expansion project. 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 #

Salvage yard

Area: M

NDAI  FAR  IRR  Potential OE

## SITE DESCRIPTION

| Parcel # (APN) | Owner Name          | Site Address       |
|----------------|---------------------|--------------------|
| 0080-110-080   | SOUTHERN PACIFIC CO |                    |
| 0080-340-060   | RUSZEL JOHN P II    | 2980 BAYSHORE ROAD |

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

Current Land Use

## OPERATIONAL HISTORY

### DoD Use Type

Storage Areas

### DoD Uses

Salvage Yard

### Secondary DoD Uses

Unknown

### Post-Army Uses

None Identified

### Flooring

Asphalt (currently)

### Disposal Information

A former Arsenal employee indicated that oil and gas were drained from vehicles directly to the ground surface in the surrounding area.

### Activities (inside/outside)

Outside

### Records Research Report Addenda Data

None Listed

### Records Research Report Comments

Beneficial use. Used for salvaging various parts, equipment, and metals. During DoD occupation, used to store reconnaissance vehicles sold for scrap. Per Bailey, former Arsenal employee, oil and gas were drained from vehicles directly to the ground surface in the surrounding area.

## ENVIRONMENTAL SUMMARY

### Furthest Stage of Environmental Investigation

NONE

## COMMENTS

Based on the report about oil and fuel drained from vehicles directly to the ground surface, the site requires further investigation.

## RECOMMENDATIONS

Additional investigation is recommended to determine the presence or absence of fuel and oil in groundwater for a potential release from former disposal activities.

# PA Summary

DoD Site #

Small arms range

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-1918            | Year Bldg. Removed | Unknown | Site Area (SqFt) | 5677 |
| Current Land Use       | Hwy                 |                    |         |                  |      |

## OPERATIONAL HISTORY

### DoD Use Type

Ordnance Storage

### DoD Uses

Small Arms Range

### Secondary DoD Uses

Building

### Post-Army Uses

Most of the firing range was in the area of the current parking lot for the Benicia-Martinez Toll Plaza.

### Flooring

Unknown

### Disposal Information

None Identified

### Activities (inside/outside)

Outside

### Records Research Report Addenda Data

The 1997 USACE Archives Search Report identified the small arms range as Area 14 (ref 544). This area, approximately 500 yards in length, is identified on a 1918 map (ref 654).

### Records Research Report Comments

Located east of Hill Road, in the vicinity of Open Storage (OS) Area 16. A firing house was located within this area, which would later become the dunnage (wooden shipping material) burn area. The direction of firing was to the east, to a target berm (butt) 250 feet south of Magazine 14. An observation house, adjacent to Magazine 14, was also located within this area.

## ENVIRONMENTAL SUMMARY

### Furthest Stage of Environmental Investigation

NONE

## COMMENTS

The 1997 USACE Archives Search Report states that the target berm was excavated during the construction of the I-680/I-780 interchange.

## RECOMMENDATIONS

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

## PA Summary

DoD Site #

T221

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 | 1953                   | Year Bldg. Removed | Not applicable | Site Area (SqFt) | 9996 |
| Current Land Use | Industrial-Limited     |                    |                |                  |      |

### OPERATIONAL HISTORY

#### DoD Use Type

Motor Pool Area

#### DoD Uses

Garage Vehicle Maintenance

#### Secondary DoD Uses

Unknown

#### Post-Army Uses

1973: Nelson Neon for an office and electrical sign fabrication and repair shop (ref 418). 1974: Browning-Ferris for equipment maintenance (ref 587). 1977: Browning-Ferris as a refinery equipment cleaning facility (ref 702). In addition, a 1-acre area between T221 and Park Road was leased to the Cal Auto Center in 1976 for vehicle storage (ref 586).

#### Flooring

Structure made of concrete & aluminum

#### Disposal Information

None Identified

#### Activities (inside/outside)

Inside

#### Records Research Report Addenda Data

A 1954 map (ref 646) identified this building as a vehicle repair shop. A Building Zone list from 1962 identified Building T221 as a Sedan Shed and Heavy Duty Repair shop with a planned vacate date of March 1964 (ref 713).

#### Records Research Report Comments

Built of concrete and aluminum in 1953 (ref 196). The building is no longer present. Available records do not identify when or by whom the building was removed.

### ENVIRONMENTAL SUMMARY

#### Furthest Stage of Environmental Investigation

NONE

### COMMENTS

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

### RECOMMENDATIONS

Additional investigation is recommended to determine the presence or absence of fuels, solvents, metals and oils in groundwater downgradient of the building for a potential release from former maintenance activities.

## PA Summary

DoD Site #

T222

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 | 1953                   | Year Bldg. Removed | Not applicable | Site Area (SqFt) | 630 |
| Current Land Use | Industrial-Limited     |                    |                |                  |     |

### OPERATIONAL HISTORY

#### DoD Use Type

Motor Pool Area

#### DoD Uses

Steam Cleaning

#### 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 1954 map identified this building as a steam cleaning facility (ref 646). A Building Zone list from 1962 identified this building as a Steam Rack facility (ref 713).

#### Records Research Report Comments

Constructed of concrete with a corrugated iron roof in 1953 (ref 196). Building no longer present - removal date unknown.

### ENVIRONMENTAL SUMMARY

#### Furthest Stage of Environmental Investigation

NONE

### COMMENTS

Unknown what was being steam cleaned. Unknown type of disposal practices.

### RECOMMENDATIONS

Additional investigation is recommended to determine the presence or absence of fuels, solvents, and oils in groundwater downgradient of the former building for a potential release from former cleaning activities.

## PA Summary

DoD Site #

T226

Area: M

NDAI    FAR    IRR    Potential OE

### SITE DESCRIPTION

| Parcel # (APN)   | Owner Name            | Site Address       |
|------------------|-----------------------|--------------------|
| 0080-130-100     |                       |                    |
| Year Bldg. Built | 1953                  | Year Bldg. Removed |
|                  |                       | 1962-1998          |
| Current Land Use | Industrial-Waterfront |                    |
|                  | Site Area (SqFt)      | 262                |

### OPERATIONAL HISTORY

**DoD Use Type**

Motor Pool Area

**DoD Uses**

Office

**Secondary DoD Uses**

Unknown

**Post-Army Uses**

None Identified

**Flooring**

Structure constructed of wood and aluminum

**Disposal Information**

None Identified

**Activities (inside/outside)**

Inside

**Records Research Report Addenda Data**

A 1954 map (ref 646) identified this building as a field office. A 1962 Building Zone List identifies this building as being vacant (ref 713).

**Records Research Report Comments**

Constructed of wood and aluminum in 1953 (ref 196). The building is no longer present. Available records do not identify when or by whom the building was removed. Based on a report filed with Solano County Department of Environmental Management (SCDEM) in 1990, a 12,000-gallon UST is located in the vicinity of Building T226, at the southwest corner of a present-day car wash (post closure construction) (ref 481). The UST is located on a site owned and operated by Predelivery Service Corp., Benicia Center (ref 481). No other information regarding the 12,000-gallon tank or the car wash building has been found. The status of the UST with SCDEM is unknown.

### ENVIRONMENTAL SUMMARY

**Vessel Inventory**

| Vessel # | Type | Original Owner | Size (Gal.) | Construction | Commodity Stored | Date Installed | Date Removed | Post-Army | Installed Post-Army                 |
|----------|------|----------------|-------------|--------------|------------------|----------------|--------------|-----------|-------------------------------------|
| 1        | UST  | Unknown        | 12000       | Unknown      | Unknown          | Post 1964      | Unknown      | Yes       | <input checked="" type="checkbox"/> |

Uses: Fuel Storage?

Comments: At corner of a present-day car wash.

**Furthest Stage of Environmental Investigation**

NONE

## PA Summary

DoD Site #

T226

Area: M

### COMMENTS

Records Research indicates that a 12,000 gallon UST located in the area was installed post closure. 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 #

TO68

Area: M

NDAI  FAR  IRR  Potential OE

SITE DESCRIPTION

| Parcel # (APN) | Owner Name       | Site Address |
|----------------|------------------|--------------|
| 0080-120-020   | CALIFORNIA STATE |              |

|                  |           |                    |           |                  |      |
|------------------|-----------|--------------------|-----------|------------------|------|
| Year Bldg. Built | cir. 1945 | Year Bldg. Removed | 1945-1954 | Site Area (SqFt) | 4921 |
|------------------|-----------|--------------------|-----------|------------------|------|

Current Land Use Public

OPERATIONAL HISTORY

DoD Use Type

Hospital, Laundry, and Temporary Buildings

DoD Uses

Laundry/Barracks for Prisoners of War

Secondary DoD Uses

Unknown

Post-Army Uses

None Listed

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Inside

Records Research Report Addenda Data

Based on a 1937 report (ref 131), there were no laundry facilities on the Arsenal. Laundry was sent to a commercial laundry in Benicia. However, the laundry facilities at Mare Island Navy Yard were available for enlisted personnel (ref 131). On a 1945 map (ref 650), a laundry facility was identified in Arca M at Building TO68, approximately 800 feet northeast of Building 1. Building does not appear on a 1954 map (ref 646).

Records Research Report Comments

This structure also was used as a barracks for Italian prisoners of war. This is the only known laundry facility at the Arsenal. The building has been demolished.

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 #

TO73

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 | 1946                   | Year Bldg. Removed | Not applicable | Site Area (SqFt) | 7201 |
| Current Land Use | Industrial-Limited     |                    |                |                  |      |

## OPERATIONAL HISTORY

### DoD Use Type

Hospital, Laundry, and Temporary Buildings

### DoD Uses

Recreation and Storage Building/Photo Lab/Depot Facilities Shop

### Secondary DoD Uses

Unknown

### Post-Army Uses

Tenant records from 1973 show that Dillingham Construction Corp., a dredging and general construction company, used TO73 as an office. The Wm. Simpson Construction Co., a Dillingham subsidiary, also used the facility for forklift storage and repair (ref 425). In 1975, TO73 was leased to General Overland Transport for vehicle storage (ref 587).

### Flooring

Unknown

### Disposal Information

None Identified

### Activities (inside/outside)

Inside

### Records Research Report Addenda Data

Based on Drawing 6209, dated 3 April 1959 (ref 603), building operations consisted of spray painting and cleaning area. The building contained a work area, a carpentry shop, offices, and storage rooms. On the southern end of the building was a photography laboratory. A steam cleaning area and a dry type spray booth were located on the east side of the building. According to the 1961 Facility Data Sheet, the building was being used for storage and had previously been used as a recreation building (ref 196).

### Records Research Report Comments

Built as a Theatre of Operations building and was located approximately 200 feet east of Pine Lake. Renovations were planned for TO73 to become a Depot Facilities shop in 1959. Records did not indicate if the renovations took place. The building was later demolished.

## ENVIRONMENTAL SUMMARY

### Furthest Stage of Environmental Investigation

NONE

## COMMENTS

Unknown what happened to the photo lab, steam cleaning area, and spray booth. Disposal activities were not listed. Site requires further investigation.

## RECOMMENDATIONS

Additional investigation is recommended to determine the presence or absence of solvents in groundwater downgradient of the

PA Summary

DoD Site #

W7

Area: M

NDAI  FAR  IRR  Potential OE

SITE DESCRIPTION

| Parcel # (APN) | Owner Name       | Site Address       |
|----------------|------------------|--------------------|
| 0080-340-060   | RUSZEL JOHN P II | 2980 BAYSHORE ROAD |

|                  |      |                    |         |                  |     |
|------------------|------|--------------------|---------|------------------|-----|
| Year Bldg. Built | 1942 | Year Bldg. Removed | Unknown | Site Area (SqFt) | 810 |
|------------------|------|--------------------|---------|------------------|-----|

Current Land Use Industrial-General

OPERATIONAL HISTORY

DoD Use Type

Storage Areas

DoD Uses

Salvage Warehouse/General Storage

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

A 1962 Building Zone List identifies W7 and being vacant (ref 713).

Records Research Report Comments

Located approximately 800 feet southeast of Building 155. Used for general storage, occupies approximately 800 ft2.

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 #

W8

Area: M

NDAI  FAR  IRR  Potential OE

### SITE DESCRIPTION

| Parcel # (APN)   | Owner Name         | Site Address       |         |                  |      |
|------------------|--------------------|--------------------|---------|------------------|------|
| 0080-340-060     | RUSZEL JOHN P II   | 2980 BAYSHORE ROAD |         |                  |      |
| Year Bldg. Built | 1942               | Year Bldg. Removed | Unknown | Site Area (SqFt) | 8017 |
| Current Land Use | Industrial-General |                    |         |                  |      |

### OPERATIONAL HISTORY

#### DoD Use Type

Storage Areas

#### DoD Uses

Gas Cylinder Storage

#### Secondary DoD Uses

Unknown

#### Post-Army Uses

1971: The Purdy Co. of Illinois used the building for storage of railroad material and steel scrap, and for railroad track rental (ref 587). 1973: Associated Metals Co. for scrap iron and steel salvage operations.

#### Flooring

Asphalt (currently)

#### Disposal Information

None Identified

#### Activities (inside/outside)

Inside

#### Records Research Report Addenda Data

A Building Zone list from 1962 specified W8 as being used for salvage storage, with a proposed vacate date of September 1962 (ref 713).

#### Records Research Report Comments

Located approximately 800 feet southeast of Building 155. Occupies approximately 8,000 ft<sup>2</sup> and was used to store gas cylinders (ref 650) and to store and dispose of scrap and salvage materials (ref 61).

### 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 #

Waste Water Discharge

Area: M

NDAI    FAR    IRR    Potential OE

**SITE DESCRIPTION**

| Parcel # (APN) | Owner Name | Site Address |
|----------------|------------|--------------|
| Various        | Various    |              |

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

**OPERATIONAL HISTORY**

**DoD Use Type**  
Water Supply and Wastewater

**DoD Uses**  
Waste Water Discharge

**Secondary DoD Uses**  
Unknown

**Post-Army Uses**  
Various landowners using existing buildings

**Flooring**  
Not applicable

**Disposal Information**  
Sewage collection and storm drain system carried the Arsenal's untreated industrial wastes into both the Carquinez Strait and Suisun Bay.

**Activities (inside/outside)**  
Outside

**Records Research Report Addenda Data**  
None Listed

**Records Research Report Comments**

All original sewers at the Arsenal flowed (without pretreatment) by gravity into the Carquinez Strait and Suisun Bay (ref 131) and at discharge points D, E, and F in Area M. This was deemed acceptable practice for waste water discharge during the time the military occupied the Arsenal. By 1952, the system consisted of two separate collection systems - the sanitary system and the storm water system - which both discharged through multiple outlets into Suisun Bay and the Carquinez Strait. The storm water system received runoff from paved areas. These two systems were constructed of approximately 41,000 feet of vitrified clay pipe and 780 feet of 6-inch cast iron pipe (ref 405).

Three sanitary lines served Area M. The first line (which discharged at Point E) ran from the motor pool eastward to Building 7, and then to Suisun Bay (ref 405). A tributary running from Buildings 75, 76, 94, and TO73 connected to this line west of Building 7. The second line served Buildings 155, W7, and W8, and emptied into the drainage canal, which had its outflow at Point F (ref 405). This line was crushed by settling buildings, causing continual drain clogging. A new line from the warehouse section (Area W) was installed to bypass the broken sections.

The third sanitary line handled waste from Buildings 50, 111, and 136 and discharged at Point D (ref 405).

Based on a 1952 report, no storm water connections were made to the sanitary system. There were, however, some discharges of ordnance waste into the storm system (ref 405). The storm water system also collected waste generated during steam cleaning, degreasing, dipping, preserving, and painting of vehicles and parts. Chemicals used in these processes included acids, soaps, various types of degreasers, and oil (refs 405 and 196).

Over time, the settling of native soil and fill material under building foundations caused cracks and displacements of many sections of pipe in both systems (ref 536).

## PA Summary

DoD Site #

Waste Water Discharge

Area: M

### ENVIRONMENTAL SUMMARY

#### Furthest Stage of Environmental Investigation

NONE

### COMMENTS

The sewage and storm drain system was a major conveyance of untreated industrial wastes. There are numerous reports of pipes needed repair, especially in area of the unstable swamp area. The sewer/storm drain system was used by landowners after the Army left in 1964. The storm drain system has remained unchanged since the Arsenal closed.

### RECOMMENDATIONS

In accordance with the FUDS program, the sewer/storm drain system is no longer the responsibility of DoD since the system was used after the Army left. Therefore, no DoD action is indicated (NDAI) for this site.

PA Summary

DoD Site #

Well 1

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-1918            | Year Bldg. Removed | Unknown | Site Area (SqFt) | 50 |
| Current Land Use       | Hwy                 |                    |         |                  |    |

OPERATIONAL HISTORY

DoD Use Type

Water Supply and Wastewater

DoD Uses

Water Well

Secondary DoD Uses

Well

Post-Army Uses

None Identified

Flooring

Unknown

Disposal Information

None Identified

Activities (inside/outside)

Outside

Records Research Report Addenda Data

The 1918 Arsenal map (ref 654) shows two water supply wells (Well 1 and Well 2).

Records Research Report Comments

Well 1 was located near Suisun Bay, northeast of Sandstone Quarry 2, and designated on a 1918 map legend as "in ravine". No other information concerning this well has been found, and it is not known whether the well was properly abandoned. There are no signs of the well today.

ENVIRONMENTAL SUMMARY

Furthest Stage of Environmental Investigation

NONE

COMMENTS

The area is the current area of construction for the expansion of the Benicia-Martinez Bridge. The well is no longer present. 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 #

Well 2

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 | pre-1918           | Year Bldg. Removed | Unknown | Site Area (SqFt) | 50 |
| Current Land Use | Industrial-Limited |                    |         |                  |    |

## OPERATIONAL HISTORY

### DoD Use Type

Water Supply and Wastewater

### DoD Uses

Water Well

### Secondary DoD Uses

Well

### Post-Army Uses

None Identified

### Flooring

Unknown

### Disposal Information

None Identified

### Activities (inside/outside)

Outside

### Records Research Report Addenda Data

The 1918 Arsenal map (ref 654) shows two water supply wells (Well 1 and Well 2).

### Records Research Report Comments

Well2 was located near Sandstone Quarry 1 and Building 7, and is designated on a 1918 map legend as "in quarry". No other information concerning this well has been found, and it is not known whether the well was properly abandoned. There are no signs of the well today.

## ENVIRONMENTAL SUMMARY

### Furthest Stage of Environmental Investigation

NONE

## COMMENTS

The well no longer exists. 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.