

Five-Year Review Report

Discretionary Five-Year Review Report

for

Jibboom Junkyard

Sacramento

Sacramento County, California

September 2007

PREPARED BY:

United States Environmental Protection Agency

Region IX

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Approved by:

Date:



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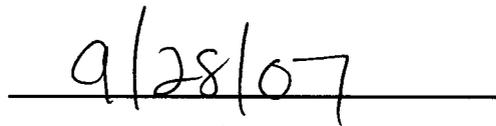


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List of Acronyms

CalTrans	California Department of Transportation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DHS	California Department of Health Services, currently Department of Public Health
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EPA	Environmental Protection Agency
I-5	Interstate Highway 5
IC	Institutional Control
NCP	National Oil and Hazardous Substances Pollution contingency Plan
NPL	National Priorities List
O&M	Operations and Maintenance
PG&E	Pacific Gas and Electric Company
ppm	parts per million
RA	Remedial Action
RAP	Remedial Action Plan – State of California
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
RPM	Remedial Project Manager
SP	Southern Pacific Transportation Company (Railroad)
SARA	Superfund Amendments and Reauthorization Act of 1986
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers

Executive Summary

The remedy for the Jibboom Junkyard Superfund site in Sacramento, California included excavation and off-site disposal of contaminated soils on the portion of the Site currently under Jibboom Street Park. A former metal salvaging operation had left significant concentrations of lead, copper, zinc and polychlorinated biphenyls (PCBs) in the soil. The site achieved construction completion with the final inspection and approval on July 1, 1987. The site was formally deleted from the National Priorities List on September 10, 1991. Because the site was considered available for unrestricted access and unrestricted use after completion, no five-year review was required. Region IX elected to complete a discretionary Five-Year Review after the City of Sacramento approved preliminary development plans that could change land-use in the vicinity to residential.

The assessment of this five-year review is that the remedy at Jibboom Junkyard remains protective of the human health and the environment because residual concentrations measured in the soil are within the risk range for residential use. EPA reviewed soil and groundwater data from the Remedial Action, conducted statistical analysis of the distribution of contaminants in soil throughout the remediated portion of the site, and considered current information on the toxicity of lead and PCBs. Although there is no new information for the portion of the site currently part of the Interstate 5 right-of-way, EPA recommends that the property manager, California Department of Transportation (CalTrans), use existing management systems (such as the maintenance alert database and underground services alert system) to allow future managers and construction workers to identify the potential for encountering subsurface soil contaminated with lead and PCBs. Information available to EPA at the time of the ROD indicated that substantial soil contamination of lead and PCB in the CalTrans right-of-way was unlikely, but this conclusion was not confirmed by sampling.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name (from WasteLAN): Jibboom Junkyard		
EPA ID (from WasteLAN): CAD980737613		
Region: IX	State: CA	City/County: Sacramento
SITE STATUS		
NPL status: <input type="checkbox"/> Final <input checked="" type="checkbox"/> Deleted <input type="checkbox"/> Other (specify)		
Remediation status (choose all that apply): <input type="checkbox"/> Under Construction <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Complete		
Multiple OUs?* <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	Construction completion date: 07 / 01 / 1987	
Has site been put into reuse? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
REVIEW STATUS		
Lead agency: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> State <input type="checkbox"/> Tribe <input type="checkbox"/> Other Federal Agency _____		
Author name: Kevin Mayer		
Author title: RPM	Author affiliation: USEPA	
Review period: 1/1/2007 to 8/30/2007_		
Date(s) of site inspection: 1/25/2007		
Type of review: <input type="checkbox"/> Post-SARA <input type="checkbox"/> Pre-SARA <input type="checkbox"/> NPL-Removal only <input type="checkbox"/> Non-NPL Remedial Action Site <input type="checkbox"/> NPL State/Tribe-lead <input checked="" type="checkbox"/> Regional Discretion		
Review number: <input checked="" type="checkbox"/> 1 (first) <input type="checkbox"/> 2 (second) <input type="checkbox"/> 3 (third) <input type="checkbox"/> Other (specify) _____		
Triggering action: <input type="checkbox"/> Actual RA Onsite Construction at OU # _____ <input type="checkbox"/> Actual RA Start at OU# _____ <input type="checkbox"/> Construction Completion <input type="checkbox"/> Previous Five-Year Review Report <input checked="" type="checkbox"/> Other (specify) Change in land use plans. Consideration of updated toxicity information.		
Triggering action date (from WasteLAN): none		
Due date (five years after triggering action date): none		

Five-Year Review Summary Form, cont'd.

Issues:

There are no issues that affect protectiveness. The Jibboom Park portion of the Site contains residual PCBs at levels within the residential risk range and lead levels below the residential hazard quotient.

Nothing has changed on the highway I-5 portion of the Site since the Record of Decision was signed in 1985. The Record of Decision did not select a remedy for the highway I-5 portion of the Site because historical records and interviews indicated that the operations were predominately on the Jibboom Park portion of the Site and, if there was contamination under highway I-5, then the existing freeway would act as a effective control against exposure on that portion of the Site. The remedial investigation did not collect samples under the current Highway I-5

Recommendations and Follow-up Actions:

Information available to EPA at the time of the ROD indicated that substantial soil contamination of lead and PCB in the CalTrans right-of-way was unlikely, but this conclusion was not confirmed by sampling. For the portion of the Associated Metals property currently part of the I-5 right-of-way, EPA recommends that CalTrans use existing property management systems (such as the maintenance alert database and underground services alert system) to allow future managers and construction workers to identify the potential to encounter subsurface soil contaminated with lead and PCBs.

Protectiveness Statement(s):

The remedy at Jibboom Junkyard remains protective of the human health and the environment because all residual concentrations are within the risk range for residential use. In addition, the residual concentrations are under the ten feet of cover the City of Sacramento added when converting the Site to a park.

1. Introduction

The purpose of a Five-Year Review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review Reports. In addition, Five-Year Review Reports identify issues found during the review, if any, and recommendations to address them.

The Agency is preparing this Five-Year Review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA §121 states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The agency interpreted this requirement further in the NCP;40 CFR §300.430(f)(ii)states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

The statutory requirement for conducting Five Year Reviews at a Superfund Site applies only to sites with Records of Decision signed on or after October 17, 1986. Since the ROD for Jibboom was signed in 1985, the statutory requirement for a Five Year Review does not apply to Jibboom. EPA policy also requires reviews if contamination was left at the site at levels that could pose a threat if there is unrestricted future use of the site. At Jibboom, the cleanup levels achieved were within the levels considered protective for all uses at the time of the ROD.

In 2006, it came to EPA's attention that land use patterns in the immediate vicinity of the Jibboom Site included the potential for high density residential development. EPA Region 9 determined that a Discretionary Five Year Review for the Jibboom Site is justified due to the potential changes in land use patterns in the vicinity, particularly in light of current scientific information on the protective levels of lead and PCBs in residential soil.

The United States Environmental Protection Agency (EPA) Region IX has conducted a Five-Year Review of the remedial actions implemented at the Jibboom Junkyard Superfund site (Site) in Sacramento, Sacramento County, California. This review was conducted from January 2007 through July 2007. This report documents the results of the review.

2. Site Chronology

Table 1 lists the chronology of events for the Site.

Table 1: Chronology of Site Events

Event	Date
Associated Metals Co. used property for metal salvaging operations	1950/1951-1965
Associated Metals discontinues operations onsite	1965
State of California Department of Transportation purchases property for the construction of I-5	1965
Extensive on and off-site surface and subsurface soil sampling conducted by EPA and the State of California Department of Health Services (DOHS)	1981-1985
ROD approved	5/9/1985
ROD amendment completed	10/4/1985
Final RA Completion Report Approved	7/01/1987
US Army Corps of Engineers certifies completion of Cleanup Action	3/30/1988
EPA Deletion of Site	9/10/1991
EPA remedy completed- no further remedial action required	4/30/1992
DTSC signs Interagency Agreement with the Department of Water resources to complete the RI/FS, Remedial Action Plan (RAP) and certification of the former PG&E Building site	11/01/1994
RI/FS approved	06/16/1995
RAP/DES approved	12/17/1996
Approximately 0.75 acres of PG&E Building site capped and 2.5 acres released for reused	12/17/1996
Approximately 1.5 acres capped including the building	08/29/1997
Voluntary Cleanup Agreement executed for the installation of two underground utilities	09/09/2002
Jibboom Street Park Phase One completed, City of Sacramento Parks and Recreation Department.	2006
Sacramento City Council agrees to consider plans for condominium development at former PG&E building site	February, 2006

3. Background

Physical Characteristics:

The Jibboom Junkyard site is located in Sacramento, California on the east bank of the Sacramento River. The site is approximately 2000 feet downstream from the confluence of the American and Sacramento Rivers. The nine acre site is the former location of the Associated Metals Company salvage yard. The largest portion of the former Associated Metals property is the 6.7 acres covered by Interstate 5 (I-5) and the adjacent Jibboom Street, both of which are part of the California Department of Transportation highway right-of-way. The remaining 2.3 acres of the former Associated Metals property had been a relatively flat open field which has been converted into Jibboom Street Park, a City of Sacramento public park.

Situated in a formerly industrial part of town, the site is approximately 4,000 feet from Old Sacramento, a historic downtown area, and approximately 6,000 feet from the State Capitol Building.

North of the Site is an abandoned Pacific Gas and Electric Company (PG&E) steam electric power generating station that was constructed in 1912. Several motels are also located to the north of the site along Jibboom Street. The closest of these motels is 400 feet from the site. A water intake structure for the Sacramento City Water Department was constructed in 2004 in the Sacramento River directly west of the site. This intake supplies water to the City of Sacramento Filtration Plant. The filtration plant itself is 550 feet east of the uncovered portion of the site, to the east of I-5.

There are no homes in the vicinity of the site. At the time of the ROD, the only known residents in the area were members of a family who were residing in a motel north of the site. In 1994, the City of Sacramento began planning for development of the Richards Boulevard Project Area which includes the potential for 15 million square feet of office space and 6,500 housing units in the area north of downtown Sacramento, encompassing the Jibboom site. The development plans included both Jibboom Street Park and the Union Pacific Railyards southeast of the Jibboom Superfund Site. Just over a mile north of the site, Jibboom Street turns east under I-5 and becomes Richards Boulevard. Sacramento's Social Service Complex was completed in 2001 to consolidate the County's homeless programs in one location in the Richards Boulevard Area. The corridor along the Sacramento River is occasionally used for pedestrian traffic between the Social Service Complex and downtown.

The site lies within the 100-year floodplain of the Sacramento River. However, a California Department of Water Resources, Sacramento River Flood Control Project levee helps to protect the site from potential flooding. The levee is not considered part of the Jibboom Site.

Land and Resource Use:

The largest portion of the former Associated Metals property, 6.7 acres, is covered by I-5 and the adjacent Jibboom Street. The I-5 freeway was elevated approximately 20 feet above the former grade by the addition of clean fill material. The remaining 2.3 acres of the former Associated Metals property has been converted into Jibboom Street Park. Soil has been imported to raise the much of the park grounds to approximately the elevation of the levee, allowing a view of the Sacramento River. By the summer of 2006, approximately 8 to 10 feet of clean soil had been added to much of the surface of the original 2.3 acres as a result of this landscaping. The park features landscaping, a small parking area and a fountain.

The Jibboom Street Park acts as destination attraction along the existing Sacramento River Parkway bicycle trail that connects Old Sacramento to Discovery Park. The project is being developed in phases, with the first phase completed in 2006. According to a City of Sacramento Parks official, funding for the second phase had been returned to the State when a proposal for a potential condominium development plan was approved by the City Council on February 14, 2006. Although this project did not move past preliminary planning stages, the potential for other residential development in the surrounding community remains strong. It is not clear when or if the funding for the second phase of Jibboom Street Park may become available.

Jibboom Street Park phase one developed the 2.3 acres of the Site, and the second phase includes plans to develop portions of the PG&E Building property. A major feature for the proposed park development on the former PG&E Building property is a large group picnic area with shade structures, picnic tables, group grill and site furniture, along with a parking lot. Future development of the project could include rehabilitation of the historic building for a commercial and/or community use, and could involve development of a conference center or restaurant with a terrace overlooking the Sacramento River.

Groundwater beneath the site has not been used, even for industrial purposes. There are no potable or agricultural uses of the groundwater in the area. The water is hydraulically connected to the Sacramento River. The river serves as a hydraulic connection, and presumably a barrier, to the potable groundwater that is on the western side of the Sacramento River. The groundwater beneath the site rises to within five feet of the ground surface for up to six months of the year. Flow direction is presumed to fluctuate semiannually according to the river stage.

Surface water flowing from the covered portions of the site collects in ditches on both sides of the freeway and in the curb gutters along Jibboom Street. There are no storm drains along Jibboom Street, so excess rain water flows off-site, eventually to the river. Surface water from the remaining areas of the site either percolates into the ground or evaporates. Landscape irrigation water is adjusted to meet the requirements of the park plants without excess runoff. However, any incidental runoff would also flow along Jibboom Street curb gutters in the absence of a storm drain system.

History of Contamination

The March 30, 1988 Final Technical Report for the Jibboom Site details the history of contamination for the site and adjacent areas. That Report contains a 1928 aerial photograph indicating that the Jibboom Site was still wooded. By 1946, the original Jibboom Street alignment had been paved and the entire site had been cleared of trees. Disposal activities at the site were not evident.

In 1950 or 1951, the Associated Metals Company purchased the property. The property was used for a metal salvage operation from this time until 1965. All grades of metal were salvaged, including railroad cars, army tanks, batteries, and some transformers. Although no inventories or records of operations at the yard are known to exist, a former employee indicated that there was on-site disposal of scrap metal as well as some direct discharge of transformer oils to the ground. Transformers were not frequently scrapped. This employee, who was the yard foreman, and historical aerial photographs have been the principle sources of historical information regarding releases of hazardous materials at the Associated Metals Yard. These records indicate that the majority of the operations occurred on the Jibboom Park portion of the Site and that there was 'mostly storage and little waste disposal'¹ on the I-5 and Jibboom Street portion of the Site.

In 1965, the State of California Department of Transportation (CalTrans) purchased all of the Associated Metals Company property for easement and construction of I-5. No soil was removed, but the site was graded during the freeway construction. By 1967, Jibboom Street was realigned to the present location.

The nine-acre site, which was ranked for the National Priorities List (NPL), was originally described as within the boundaries of the operations at the defunct Associated Metals Company Yard. The site was named for an unofficial landfill that was operated from the 1930's through the early 1970's along Jibboom Street to the north of the actual site.

In 1912, PG&E constructed a steam electric power generating station north of the Site. The station consisted of the main power generating building, three 500,000 gallon aboveground oil storage tanks on concrete pads with retaining walls, and two 8,400 gallon underground storage tanks. In 1957, PG&E ceased operations at this plant. By 1967, the three aboveground storage tanks had been dismantled and removed. The now historic PG&E building and the two underground storage tanks remain in place.

Sometime prior to 1928, the City of Sacramento constructed a water filtration plant 150 feet due east of where the site would be located.

Southern Pacific Transportation Company (SP) began operations at a 238 acre yard southeast of the site in 1863. This area, now known as the Union Pacific Railyards, is no longer active. The City of Sacramento has published major redevelopment plans that could be implemented over the next 10-20 years. The facility had been a major locomotive overhaul facility for SP, and had historically handled large amounts of solvents, paints, and other potentially hazardous materials and wastes.

¹ Record of Decision, Jibboom Superfund Site, 1985

Basis for Taking Action

Between 1981 and 1985, EPA and the State of California Department of Health Services (DHS) performed extensive on and off-site surface and subsurface soil sampling and in 1984, DHS constructed a fence around the site. The 1985 Final Technical Report found three of the areas on the site contained heavy metals and PCBs. There are no records of any samples taken from the I-5 or Jibboom Street right-of-way.

Analysis of surface and subsurface soil samples by the DHS and EPA indicate copper, zinc and lead above acceptable state and federal concentration levels. PCBs were detected in the top layers of soil throughout the site, although the levels detected did not exceed the former state or federal criteria for the definition of a hazardous substance, 50 ppm PCBs.

Initial Response

There were no initial responses taken prior to the implementation of the final remedy.

4. Remedial Actions

Remedy Selection

The Record of Decision (ROD) for the Jibboom Junkyard Superfund Site was signed on May 9, 1985, and a ROD amendment was signed on October 4, 1985. EPA selected a cleanup action consisting of excavation and removal of contaminated soil to an offsite Class 1 hazardous waste disposal facility on the Jibboom Park parcel of the Site. The selected remedy also included excavation of a “partially contaminated 0.4 acre parcel of land north of the site”.

EPA did not select a remedy on the 6.7-acre portion of the site, covered by highway I-5 and Jibboom Street. The ROD stated that “...historical records and discussions with a previous foreman at the yard indicated that mostly storage and little waste disposal occurred in the eastern portion of the site (the I-5/Jibboom Street parcel)”. The ROD noted that the elevated and paved roadway would prevent direct exposure on these sections of the former Associated Metals property.

Remedial Action Objectives

The primary objective of the ROD was to prevent direct exposure to the contaminated soil. A secondary objective was to prevent contamination from migrating to the groundwater, although the relative immobility of the contaminants was confirmed by subsequent groundwater monitoring. The soil clean-up level originally selected in the ROD was 200 ppm for lead, which was considered background. In 1985 EPA amended the ROD to raise the clean-up level for lead to 500 ppm, a level which was considered protective for all uses. The other chemical of concern, PCB, was determined to be at non-hazardous levels prior to the remedy implementation.

Remedy Implementation

On May 10, 1985, EPA submitted an Interagency Agreement with the US Army Corps of Engineers (USACE) to perform the remedial design. The design was completed on August 28, 1985. EPA then submitted an Interagency Agreement with USACE to implement the Remedial Action. Site mobilization and on-site activities began on October 17, 1986. The first off-site shipment of contaminated soil occurred on December 2, 1986.

On July 1, 1987, USACE conducted the Final Inspection and determined that the remedial action was complete. At least 12 inches of soil were removed from the entire 2.3 acres exposed area of the former Associated Metals Property, and in some areas four or more feet were removed before the objectives were achieved. Approximately 10,000 square feet of the former PG&E Building Property was also excavated.

The USACE collected samples along a 40-foot grid system over the entire exposed site including area on the former PG&E building property. Sample results for soil at the final depth were submitted for lead, copper, zinc and PCBs within each 40 foot by 40 foot action. Confirmation samples at the bottom of the excavation did not exceed the 500 ppm standard for lead. Excavated soil was replaced with clean backfill.

Operation and Maintenance

Consistent with RCRA 40 CFR 264.111, the cleanup of the site was in compliance with “clean closure” requirements. Accordingly, no post-closure care was required. Because all contamination above clean-up levels was removed from the site, no operation or maintenance activities were required to ensure the effectiveness of the remedy.

EPA was responsible for site monitoring and maintenance of the perimeter fence for one year after the Final Inspection. After July 26, 1988, the state of California assumed full responsibility for the site.

In July 1998, the State of California, as owner of the former PG&E building property, recorded a Land Use Restriction on a portion of that property. It identifies a ‘clay cap area’ that is covered by the Restriction. This Restriction prohibits residential, daycare, school, group care or hospital on the property without written concurrence from DTSC. The Covenant notes a final Remedial Action Plan (RAP) dated December 1996 that required containment of the waste by an engineered earthen cap.

The Land Use Restriction also notes that both the former PG&E building property and the former Associated Metals facility are zoned for commercial use only.

5. Progress Since the Last Five-Year Review

This is the First Five Year Review for the site.

6. Five-Year review Process

Administrative Components

The Jibboom Junkyard Five-Year Review team was led by Kevin Mayer of EPA, Remedial Project Manager (RPM) for the Site, and included members from the Technical Support Team and Remedial Case Development Team in Region IX. Steve Ross of the Department of Toxic Substances Control assisted in the review as the representative for the support agency. Dorian Young and Sarah Mueller from the Office of Regional Counsel and Lauren Berkman from the Community Involvement Office were also important participants in the Five Year Review.

Community Notification and Involvement

Activities to involve the community in the five-year review were initiated with a meeting in early January 2007 between the RPM and the Community Involvement Coordinator (CIC) for the Jibboom Junkyard Superfund site. A notice was published in the Sacramento Bee on March 20, 2007, announcing that a five-year review was to be conducted and soliciting comments or questions. No formal comments were received.

Document Review

This five-year review consisted of reviewing the “Final Technical Report of the EPA Superfund Clean-up, Jibboom Junkyard” dated March 30, 1988 and the sampling confirmation grid maps provided by the USACE. In addition, the Remedial Action Certification Form for the former PG&E Building Property and the Land Use Covenant on the same property was reviewed.

Data review

The confirmation sampling on the 40x40 foot grid used by the USACE showed that, for all 77 sampling points, the lead and the PCB concentrations at the bottom of the excavation were below the ROD objective of 500 ppm for lead and the inferred objective of 50 ppm for PCB (Data presented in Table 2 on page 17).

Current non-carcinogen standards for lead are 400 ppm for residential and 800 ppm for industrial. Only five of the seventy-seven sample locations on the site exceeded the residential use value of 400 ppm lead in soil. One sample for lead above 400 ppm was located in the northeast corner of the excavation, currently covered by the clay cap on the former PG&E Building property. The other four samples exceeding the current standards are within the former Associated Metals facility and beneath the current built-up park area. The 95% upper confidence level for the residual lead contamination throughout the site is 207 ppm, well below the residential standard of 400 ppm. Therefore, the site is still considered protective for all uses. The statistical analysis for lead is presented in Table 3.

At the time of excavation the primary chemical of concern was lead, not PCB because the definition of a hazardous substance for PCB was then 50 ppm. Since the ROD, the standards for PCBs have been lowered significantly. The current TSCA non-risk based standard for PCB for soil in residential locations is 1 ppm and the standard for industrial areas is 10 ppm. Based on these numbers, there were eight sample locations exceeding the residential use level and one sample exceeded the industrial use value. All

but one of the eight sample locations exceeding 1 ppm for PCB is on the former Associated Metals property (Table 2). One sample along the northern line of the excavation had a concentration of 1.6 ppm. The one in a million risk number for PCB for residential use is 0.2 ppm and the one in 10,000 risk is 20 ppm. The 99% upper confidence level for PCB concentrations throughout the site is 2.9 ppm which is within the risk range for residential use. The statistical analyses supporting this conclusion are presented in Table 4. Therefore, the site is still considered protective for all uses.

EPA sampled and analyzed groundwater samples twice after completion of the remedy in 1986 and 1987. The results showed that groundwater had not been impacted by the by the site contamination.

Site Inspection

A preliminary site inspection was held on August 8, 2006 by Kevin Mayer of EPA and Steve Ross of DTSC and a full site inspection held on January 25, 2007 by Kevin Mayer and Dennis Day of the City of Sacramento Department of Parks and Recreation. The new park was very well maintained. The park was noticeably higher in elevation than Jibboom Street – demonstrating that a large amount of fill had been added to bring the grade up to the level of the levees. It was noted that there had been improvements to the curb and shoulder of Jibboom Street which may have temporarily exposed contaminated soil not addressed in the remedy. It was also noted that in 2004 two 54-inch diameter water pipelines were constructed underground beneath the park and the freeway from the new water inlet structure to the Sacramento Water Treatment Plant east of the I-5 freeway.

Interviews

Interviews were conducted with four agencies connected to the site. Steve Ross of DTSC was interviewed at the Site on August 8, 2006. In addition, Dennis Day from the Sacramento Department of Parks and Recreation was interviewed at Jibboom Park on January 25, 2007. No significant problems regarding the site were identified during the interviews. Mr. Day discussed some of the upcoming plans for the Jibboom Street area including possible future construction of storm drains along Jibboom Street. Mr. Ross discussed some of the State requirements for institutional controls and thought the use of them on Jibboom site was reasonable. Mr. John Bassett of Sacramento Area Flood Control Agency was interviewed by telephone on February 23, 2007, to discuss the river levee. California Department of Transportation Environmental and Hazardous Substances staff was contacted in May and June of 2007 and a meeting at CalTrans offices in Sacramento was held on June 27, 2007. In these conversations with CalTrans officials, EPA discussed the potential, although unlikely, for encountering lead and PCB contamination beneath the I-5 portion of the former Associated Metals property. CalTrans staff indicated that CalTrans institutional controls would be helpful to warn future managers to use proper care in excavation around or beneath the site.

Table 2. Confirmation sample results for surface soil concentration of lead and PCB after 1987 remedial action, with depth of soil removed at each location.

Feet from South end of site	Feet from East edge of site	Depth of Sample Inches	Lead in Soil mg/ kg	PCB in Soil ug/ kg
40N	0W	12	8.97	ND
80N	0W	12	11.3	ND
120N	0W	12	146	97
160N	0W	12	113	92
200N	0W	12	48.5	31
200N	40W	12	12	ND
240N	0W	12	38.5	22
240N	40W	12	335	1800
240N	80W	12	12.6	26
280N	0W	12	45.3	260
280N	40W	30	405	110
280N	80W	12	20.4	37
320N	0W	12	36.4	77
320N	40W	18	369	1200
320N	80W	12	461	14000
320N	120W	12	7.33	37
320N	125W PIT	36	5.63	ND
360N	0W	12	224	180
360N	40W	24	434	430
370N	90W PIT	36	90.8	390
390N	90W PIT	36	114	150
400N	0W	30	405	1500
400N	40W	30	48.9	130
400N	120W	12	52.5	130
440N	0W	12	63.2	9000
440N	40W	24	301	110
440N	80W	30	39.6	110
440N	120W	42	15.8	ND
440N	160W	12	12	120
480N	0W	12	14.1	10
480N	40W	36	131	190
480N	80W	30	182	59
480N	120W	18	151	140
480N	160W	12	12.5	24
520N	0W	12	117	74
520N	40W	24	149	370
520N	80W	18	393	470
520N	120W	18	22.4	ND
520N	160W	12	9	ND
560N	0W	12	345	390
560N	40W	18	34.7	ND
560N	80W	18	16.8	7.4
560N	120W	12	5.6	ND
560N	160W	12	10	ND
560N	200W PIT	204	17	ND
560N	210W PIT	204	15	ND

Feet from South end of site	Feet from East edge of site	Depth of Sample Inches	Lead in Soil mg/ kg	PCB in Soil ug/ kg
600N	0W	12	265	130
600N	40W	12	31.9	ND
600N	80W	12	481	4300
600N	160W	12	31	ND
600N	200W	12	44.8	ND
610N	120W PIT	240	63	191
640N	0W	12	5.8	ND
640N	40W	24	85.9	170
640N	80W	18	153	ND
640N	120W	12	17	ND
640N	160W	12	24	ND
640N	200W	12	192	ND
640N	240W	12	26.9	ND
650N	250W	0	15	ND
680N	0W	12	322	480
680N	40W	36	64	490
680N	80W	12	239	1800
680N	120W	12	24	ND
680N	200W	12	22.8	ND
680N	240W	12	98.3	ND
720N	0W	12	358	680
720N	40W	36	14.5	ND
720N	80W	36	178	580
720N	120W	12	26.6	ND
760N	0W	18	82.7	57
760N	40W	24	40.4	640
760N	80W	12	346	ND
760N	120W	12	16.9	ND
800N	0W	12	432	360
800N	40W	48	38.5	310
800N	80W	12	308	1600

(N=77)

Mean
Std. Dev.
95% UCL

Lead mg/kg	PCB ug/kg
124	568
141	1942
151	936

2007	Shaded Prelim.	Results Remedial	Exceed Goals
Lead: 400	mg/kg	PCBs:	1000 ug/kg

Table 4. EPA Statistical Software (ProUCL 4.0) analyses of sample results for surface soil concentration of PCBs at Jibboom in 1987. Recommendations are shaded.

Data File		Variable:	5
Raw Statistics		Normal Distribution Test	
Number of Valid Samples	77	Lilliefors Test Statistic	0.366005
Number of Unique Samples	42	Lilliefors 5% Critical Value	0.100969
Minimum	5	Data not normal at 5% significance level	
Maximum	14000		
Mean	567.6156	95% UCL (Assuming Normal Distribution)	
Median	59	Student's-t UCL	936.0854
Standard Deviation	1941.752		
Variance	3770400	Gamma Distribution Test	
Coefficient of Variation	3.420892	A-D Test Statistic	5.641575
Skewness	5.669872	A-D 5% Critical Value	0.869723
		K-S Test Statistic	0.197004
Gamma Statistics		K-S 5% Critical Value	0.110734
k hat	0.289816	Data do not follow gamma distribution at 5% significance level	
k star (bias corrected)	0.287182		
Theta hat	1958.54	95% UCLs (Assuming Gamma Distribution)	
Theta star	1976.5	Approximate Gamma UCL	837.5834
nu hat	44.63161	Adjusted Gamma UCL	843.8842
nu star	44.22605		
Approx. Chi Square Value (.05)	29.97121		
Adjusted Level of Significance	0.046883	Lognormal Distribution Test	
Adjusted Chi Square Value	29.74744	Lilliefors Test Statistic	0.229801
		Lilliefors 5% Critical Value	0.100969
Log-transformed Statistics		Data not lognormal at 5% significance level	
Minimum of log data	1.609438		
Maximum of log data	9.546819	95% UCLs (Assuming Lognormal Distribution)	
Mean of log data	5.94868	95% H-UCL	1582.172
Standard Deviation of log data	2.227513	95% Chebyshev (MVUE) UCL	1552.295
Variance of log data	4.961816	97.5% Chebyshev (MVUE) UCL	1982.096
		99% Chebyshev (MVUE) UCL	2826.356
		95% Non-parametric UCLs	
		CLT UCL	931.694
		Adj-CLT UCL (Adjusted for skewness)	1084.371
		Mod-t UCL (Adjusted for skewness)	959.9155
		Jackknife UCL	936.0854
		Standard Bootstrap UCL	936.6732
		Bootstrap-t UCL	1766.321
RECOMMENDATION		Hall's Bootstrap UCL	2288.708
Data are Non-parametric (0.05)		Percentile Bootstrap UCL	970.2987
		BCA Bootstrap UCL	918.413
Use 99% Chebyshev (Mean, Sd) UCL		95% Chebyshev (Mean, Sd) UCL	1532.166
		97.5% Chebyshev (Mean, Sd) UCL	1949.528
		99% Chebyshev (Mean, Sd) UCL	2769.355

7. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents and the results of the site inspection indicates that the remedy is functioning as intended by the May 1985 ROD, as modified by the October 1985 Amendment. The removal of the contaminated soils has achieved the remedial objectives to eliminate contact with the soil contamination. Although there are a few subsoil sampling locations that exceed the current residential standards for lead and PCB, rigorous statistical analyses shows the upper 95% confidence level for lead is well below the current residential lead level and the upper 99% confidence level for PCBs is within the residential risk range. All remediated areas have been covered with a minimum of ten feet clean soil when the property was converted to a park.

Two samples exceeding the new standards were located on the northernmost edge of the excavation on the former PG&E Building facility that is not considered part of the Jibboom Superfund site. The State of California investigated the former PG&E Building property, and built a clay cap on the northern portion of the property. The clay cap extends to cover the location of these two exceedences.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

The amended ROD states that 500 ppm was used as the RAO for lead which was considered protective in soil. Current risk based numbers for lead under industrial use is 800 ppm. The ROD specified no standard for PCBs but a level of 50 ppm was implied as level of concern based on the definition of a hazardous waste from the 1978 TSCA regulations. The current TSCA standard for PCB for industrial areas is 10 ppm. In 1990, EPA published revised health-based standards for PCBs under CERCLA. Current risk-based standards for industrial use are 10 ppm to 25 ppm for PCB.

Although the Jibboom property is zoned industrial, a residential use scenario should be considered to determine whether the site is still protective under all uses. The current level of concern in soil for a residential exposure based on a Hazard Index of 1 is 400 ppm for lead. For PCB the 1 in a million risk is 0.2 ppm and the 1 in 10,000 risk is 20 ppm.

A re-evaluation of the confirmation sampling collected after the remedial action indicates that the 99% upper confidence level of 2.9 ppm for PCB in the soil is within the residential risk range; and the 95% upper confidence level for lead of 207 ppm is well below residential standards. See Tables 1, 2 and 3.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

The ROD did not include a remedy for the property under I-5 and Jibboom Street because it was unlikely contamination existed on the property based on historical records and interviews. The ROD also noted that the highway would act as an effective barrier if there were low levels of lead or PCBs. There is no new information that would change that conclusion. Current and projected land use is to remain a highway. Any reasonable future exposure scenario would be of limited duration during a specific maintenance or construction event. Any hypothetical PCB or lead concentrations in the soil buried beneath the I-5 right-of-way would not result in a risk during short-term, limited direct contact, even assuming levels there are similar to levels found on the Jibboom Park property where the activities resulting in contamination occurred.

An initial ecological assessment was discussed by EPA’s biologist. The major concern would be animals burrowing into the levee and exposing residual contamination. John Basset of the Sacramento Area Flood Control Agency verified that management and maintenance efforts would prevent burrowing wildlife from compromising the levee. Since the Jibboom site itself is immediately east of the levee, no ecological exposure to residual contaminants is expected.

Technical Assessment Summary

According to the data reviewed, the site inspection and the interviews, the remedy is functioning as intended by the ROD. There have been changes to the site which increased the cover material over the contaminated soil and provides additional protectiveness. There is also the potential for change of land use in the vicinity of the Site.

8. Issues

Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Remedial Investigation did not collect samples on I-5 right-of-way portion of the Site. The conclusion of the ROD was that contamination was not expected there.	N	N

9 . Recommendations and Follow-Up Actions

Issue	Recommendations/ Follow-up Actions	Party Responsible	Oversight Agency	Affects Protectiveness? (Y/N)		Milestone Date
				Current	Future	
Remedial Investigation did not collect samples on highway I-5 portion of the Site. The conclusion of the ROD was that contamination was not expected there.	CalTrans (current owner) to document a management procedure to notify workers this section of right-of-way was a Superfund site, with some potential for encountering subsurface contamination.	CalTrans with coordination of EPA and DTSC	State and EPA	N	N	9/30/2008

10. Protectiveness Statement

The remedy at Jibboom Junkyard remains protective of the human health and the environment because all residual concentrations are within the risk range for residential use. In addition, the residual concentrations are under the ten feet of cover the City of Sacramento added when converting the Site to a park.

11. Next Review

Because the remedy is protective, the Site is delisted and this is a discretionary Five-Year review, EPA will not conduct a second Five-Year review. Recommendations made in this review will be tracked to verify they are implemented. Comments received from CalTrans staff indicate that they are already in the process of implementing the recommended notification procedures through CalTrans maintenance alert database and underground services alert system. EPA expects to confirm these controls are in place by September 30, 2008.

Figures and Maps

Jibboom Junkyard Superfund Site, Sacramento California Five Year Review

Current Site Photos

**Jibboom Junkyard Superfund Site, Sacramento California
Five Year Review**

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)			
1.	O&M Documents <input type="checkbox"/> O&M manual <input type="checkbox"/> As-built drawings <input type="checkbox"/> Maintenance logs Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date X N/A X N/A X N/A
2.	Site-Specific Health and Safety Plan <input type="checkbox"/> Contingency plan/emergency response plan Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date X N/A X N/A
3.	O&M and OSHA Training Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date X N/A
4.	Permits and Service Agreements <input type="checkbox"/> Air discharge permit <input type="checkbox"/> Effluent discharge <input type="checkbox"/> Waste disposal, POTW <input type="checkbox"/> Other permits _____ Remarks _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date X N/A X N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A
5.	Gas Generation Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date X N/A
6.	Settlement Monument Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date X N/A
7.	Groundwater Monitoring Records Remarks: Groundwater monitoring in 1985-88 demonstrated no groundwater contamination. Monitoring was discontinued. Monitoring wells were not located during site inspection of Park site. _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date X N/A
8.	Leachate Extraction Records Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date X N/A
9.	Discharge Compliance Records <input type="checkbox"/> Air <input type="checkbox"/> Water (effluent) Remarks _____ No discharges, soil contamination only in the subsurface _____	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date X N/A X N/A
10.	Daily Access/Security Logs Remarks _____	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date X N/A

C. Institutional Controls (ICs)			
1.	Implementation and enforcement		
	Site conditions imply ICs not properly implemented	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
	Site conditions imply ICs not being fully enforced	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
	Type of monitoring (<i>e.g.</i> , self-reporting, drive by) _____	N/A	
	Frequency _____		
	Responsible party/agency _____	City of Sacramento (landowner and manager), Cal EPA DTSC _____	
	Contact _____	(see attached interview reports)	
	Name	Title	Date
	Phone no.		
	Reporting is up-to-date	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
	Reports are verified by the lead agency	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
	Specific requirements in deed or decision documents have been met	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
	Violations have been reported	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
	Other problems or suggestions: <input type="checkbox"/> Report attached		
	<u>Land use restrictions are recorded with the deed and are posted on CalEPA DTSC website as required by state regulation. The land use is restricted from specific uses (e.g., residential, child care, hospital) unless specific approval is given by DTSC. The City is using the land for uses that are not restricted. The ICs cover only a portion of the former PG&E property, not the entire Jibboom site</u>		
2.	Adequacy	<input type="checkbox"/> ICs are adequate	<input type="checkbox"/> ICs are inadequate <input type="checkbox"/> N/A
	Remarks: <u>The ICs are adequate for the purpose designated by DTSC's Remedial Action Plan in those parts of the former PG&E property where waste was left in place. They do not extend over the entire Jibboom site where waste was removed by the superfund action.</u>		
D. General			
1.	Vandalism/trespassing	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> No vandalism evident
	Remarks _____		
2.	Land use changes on site	<input type="checkbox"/> N/A	
	Remarks: <u>Construction and improvements to park and adjoining levee. Removal of portion of asphalt shoulder and replacement with concrete curbing and sidewalk along western edge of Jibboom Street.</u>		
3.	Land use changes off site	<input type="checkbox"/> N/A	
	Remarks: <u>Considerable planning of large-scale redevelopment of Union Pacific Railyard could increase residential, commercial and recreational use of the entire community in the future (Richards Boulevard Redevelopment Area). One effect could be construction of below-grade utilities along the roadway through the site, e.g., storm drains.</u>		
VI. GENERAL SITE CONDITIONS			
A. Roads	<input checked="" type="checkbox"/> Applicable	<input type="checkbox"/> N/A	
1.	Roads damaged	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Roads adequate <input type="checkbox"/> N/A
	Remarks: <u>Interstate 5 freeway and Jibboom Street roadway cover the majority of the site</u>		

B. Other Site Conditions
Remarks <u>See attached DTSC description of their action and land use restrictions at Jibboom Building site for an explanation of the relationship between the NPL site and the California remedial action on the adjacent property to the north. Both EPA and DTSC information indicate that contamination from the Jibboom Junkyard scrap metal operation came to be located north of the Associated Metals Company property boundary, i.e., on part of the property of the former PG&E building. Although there was a clay cap constructed as part of the State's remedial action, this cap is not related to the metals contamination from Jibboom.</u>
VII. LANDFILL COVERS <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A

X. OTHER REMEDIES
If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS
A. Implementation of the Remedy
Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.). <u>The first of two Remedial Action Objectives was to prevent potential exposure to contaminated soil by removing soil to below 500 mg/kg of lead from the uncovered area of the site (that area not covered by I-5 freeway and Jibboom Street. A second object was to remove the contaminated soil that could pose a threat to groundwater. These two objectives were fulfilled, as recorded in the 1987 Completion Report and the 1988 Deletion Memo. Even considering current Preliminary Remediation Goals for lead and PCBs and the underlying toxicology, the site is fully protective for the current uses.</u>
B. Adequacy of O&M
Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. _____N/A_____

C. Early Indicators of Potential Remedy Problems
Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future. <u>Potential changes in land use are indicated by the pace of redevelopment plans for this area of Sacramento, in addition to recent activities involving subsurface activities (water transmission pipeline) and roadway construction (shoulder repair and curb construction along Jibboom Street).</u>

D. Opportunities for Optimization
Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. _____N/A_____

Appendix B

Interviews

INTERVIEW DOCUMENTATION FORM			
The following is a list of individual interviewed for this five-year review. See the attached contact records for a detailed summary of the interviews.			
Name	Title/Position	Organization	Date
Steve Ross	Hazardous Substances Engineer	California EPA Department of Toxic Substances Control	08/08/2006
Dennis Day	Senior Landscape Architect	City of Sacramento, Parks and Recreation Department	01/25/2007
John Bassett	Director of Engineering for Design, Construction and Maintenance	Sacramento Area Flood Control Agency	02/23/2007
Ranny Eckstrom Richard Bailey Scott Nelson	Supervisor and Staff, Environmental Engineering, Office of Hazardous Waste and Noise	California Department of Transportation	06/27/2007

INTERVIEW RECORD		
Site Name: Jibboom Junkyard		EPA ID No.: CAD980737613
Subject: Preliminary Discussion of Five-Year Review for Jibboom Junkyard, with preliminary Site Inspection		Time: 10:00 am Date: 08/08/2006
Type: Telephone <u>Visit</u> Other Location of Visit: Jibboom Street Park, Sacramento CA 95814		Incoming Outgoing
Contact Made By:		
Name: Kevin Mayer Nancy Riveland-Har David Yogi	Title: Remedial Project Manager Section Chief Superfund Program Intern	Organization: US EPA Region IX
Individual Contacted:		
Name: Steve Ross	Title: Hazardous Substances Engineer, Sacramento Field Office	Organization: California Environmental Protection Agency, Department of Toxic Substances Control
Telephone No: (916) 255-3694 Fax No: E-Mail Address: Sross@dtsc.ca.gov	Street Address: 8800 Cal Center Drive City, State, Zip: Sacramento, 95826-3200	
Summary Of Conversation		
<p>Kevin Mayer, Nancy Riveland and David Yogi of EPA met with Steve Ross of DTSC at the site on August 8, 2006. We had arranged to meet with City of Sacramento officials during the visit, but we settled for telephone discussions due to missed connections.</p> <p>The site, which had soil lead and PCBs from a 1950s scrap metal operation, has been turned into an attractive park along the Sacramento River and the levee bike path, Jibboom Street Park. Various landscaping and construction activities were in progress on the day of our visit. Ten or more feet of clean soil have been added over much of the site to raise the grade above the levee and proved park visitors with a view of the river. This also reduces the risk of exposure to contaminants remaining in the subsoil. A new City of Sacramento water intake structure had been constructed in the Sacramento River about 150 feet offshore of Jibboom Street Park, with a bridge/walkway from the park to the structure in the river. Interpretive material along this walkway informed us that the new structure was completed in 2004 and included two 54-inch-diameter water transmission pipes to carry the water east to the Water Treatment Plant east of the I-5 Freeway. Lack of visible above-ground pipelines made it clear that the pipes were underneath Jibboom Street and the Freeway. Steve Ross was not aware of how deep below ground the pipes might be, nor whether and contaminated material may have been encountered during construction.</p>		

Summary Of Conversation
(Steve Ross, DTSC 08/08/2006)

We discussed plans to proceed with a discretionary Five Year Review. At this preliminary stage, Kevin suggested that the result of a Five Year Review could be a recommendation for extension of Institutional Controls (ICs) in the form of a Land Use Covenant to cover the entire site. One contaminated parcel directly north of the old junkyard property already has ICs in recorded (7/30/1998) as the result of DTSC Remedial Action Plan after the Jibboom Junkyard site was deleted from the NPL in 1988. The City owns much of the land, primarily the park area, and CalTrans is presumed to own the property under Interstate 5.

Steve Ross mentioned that California had recently adopted regulations related to ICs, including internet posting of Land Use Covenants. Model language for Land Use Covenants has also been developed. He offered his opinion that EPA should consider and adhere to these state rules and regulations if we were to require ICs at Jibboom.

We observed that a work crew was engaged in grading and landscaping in the park north of the fountain and walkway to the intake structure. A curved pathway was being laid out in this area. A fence separated the property around the old PG&E building immediately north of the park. Both Jibboom Street and the land around the PG&E building appeared to be at or near the original grade, while most of the park, the levee and the I-5 freeway were elevated with mounded soil. Another work crew was observed breaking and excavating the western edge of the Jibboom Street asphalt roadway for a section of 100 feet or so along the park. A workman informed us that this was for curb construction. We did not observe whether any soil material was being excavated.

Steve Ross expressed willingness to coordinate with EPA on a Five Year Review. He felt that an IC could be reasonable for the entire Jibboom site. He did not know whether CalTrans would be able or willing to work with EPA on a Land Use Restriction for contamination beneath the freeway. He noted that no sampling of this area had been conducted prior to the construction of the freeway.

INTERVIEW RECORD		
Site Name: Jibboom Junkyard		EPA ID No.: CAD980737613
Subject: Five-Year Review for Jibboom Junkyard, Site Inspection and Conversation with Sacramento Parks and Recreation		Time: 8:00 am Date: 01/25/2007
Type: Telephone <u>Visit</u> Other		Incoming Outgoing
Location of Visit: Jibboom Street Park, 240 Jibboom Street, Sacramento, CA 95814		
Contact Made By:		
Name: Kevin Mayer	Title: RPM	Organization: US EPA Region IX
Individual Contacted:		
Name: Dennis Day	Title: Senior Landscape Architect	Organization: City of Sacramento, Department of Parks and Recreation
Telephone No: (916) 808-7633 Fax No: (916) 808-8266 E-Mail Address: dday@cityofsacramento.org		Street Address: 915 I Street, 5 th Floor City, State, Zip: Sacramento, CA 95814
Summary Of Conversation		
<p>Kevin Mayer met with Dennis Day at the Jibboom Street Park on the morning of January 25, 2007. We walked around the site observing features and discussing City plans for the site and surrounding neighborhood. Kevin provided Mr. Day with copies of Jibboom Junkyard ROD and Deletion Memo. Together we looked over large-scale historical aerial photographs from EPA's site file. We also looked at the maps of the Decontamination Verification Soil Sample Results from 1987.</p> <p>The landscaping of the property south of the PG&E building had been completed, with paved walkways, established lawns and some other plantings and mulched area. A new curb had been constructed long the western edge of Jibboom Street, with a minimal shoulder area that no longer accommodated parking on the street. In the few places that had not been raised above the road's grade, most areas were paved for parking and walkways.</p> <p>Kevin explained that the additional soil and landscaping added by the City was beneficial in increasing the separation of park visitors from the remaining lead and PCBs in the subsoil. He described EPA's process for reviewing completed Superfund Sites. He suggested that, although no current exposure routes exist and that the current land use would not be considered a health or environmental risk, there could be future changes in use patterns that would warrant Institutional Controls such as the Land Use Restrictions on portions of the former PG&E building property.</p>		

Summary Of Conversation

(Dennis Day, Sacramento Department of Parks and Recreation 01/25/2007)

Mr. Day explained that the property surrounding the PG&E Building had been of interest to a condominium developer in early 2006, but that the developer had lost interest due to changes in the housing market. The City had developed "Phase 2" plans for this property that included landscaping and a picnic area and eventually refurbishing the building itself into a children's museum or similar use. The historic 1912 building has extraordinary high ceilings inside and a fairly attractive façade facing the river to the west. Plans also included an alternative to the high tower carrying power lines above the river. Unfortunately the funding from the State for this Phase 2 of Jibboom Park lapsed during the City Council's interest in pursuing the condominium development, and it is not known when or if the improvements will occur.

Kevin asked about the construction of the two 54-inch water pipelines for the new water intake structure. Mr. Day did not know if any soil was excavated or disposed or if any of the subsurface was tested for contamination during the project. He suggested that EPA contact the City Utilities Department. Kevin asked about the curb construction project we had observed in August 2006. Mr. Day pointed out that there were no storm drains along Jibboom Street. He mentioned that the City was working on major redevelopment projects for the Union Pacific Railyards just east of the freeway and a bit to the south of Jibboom Park. He thought that these projects could involve construction of storm drains along Jibboom Street and possibly other utility lines along Jibboom Street and I-5. We discussed whether such excavations would affect contaminated soil below the roadways and how ICs could help.

Mr. Day had a recent aerial photo mapping land ownership. His map indicated that both Jibboom Street and the I-5 right-of-way were State of California (CalTrans) property. He did not know of a specific contact for CalTrans.

We examined the historic aerial photos showing the scrap yard and soil discoloration, which appeared to continue from the Jibboom Park area to the land under Jibboom Street and the freeway. The soil sampling results showed elevated lead and PCBs in the soil excavated from the southeast portion of the former PG&E property. The results from the 1987 soil sampling also show elevated contaminants in places adjacent to the right-of-way, and it could be inferred that the contamination continues to the east.

Dennis Day expressed willingness to coordinate with EPA on a Five Year Review. We agreed that the City would be provided with a draft report for their review and comment. Mr. Day indicated that attorneys would probably be interested in the report and any recommendations to establish Land Use Covenants.

Page 2 of 2

INTERVIEW RECORD		
Site Name: Jibboom Junkyard		EPA ID No.: CAD980737613
Subject: Five-Year Review for Jibboom Junkyard		Time: 10:00 am Date: 02/23/2005
Type: <u>Telephone</u> Visit Other		Incoming Outgoing
Location of Visit:		
Contact Made By:		
Name: Kevin Mayer	Title: RPM	Organization: US EPA Region IX
Individual Contacted:		
Name: John Bassett	Title: Director of Engineering for Design, Construction and Maintenance	Organization: Sacramento Area Flood Control Agency
Telephone No: (916) 874-8731		Street Address: 1007 7th Street, 7th Floor City, State, Zip: Sacramento, CA 95814
Fax No:		
E-Mail Address: "Bassett. John (MSA)" <bassettj@SacCounty.NET>		
Summary Of Conversation		
<p>Mr. Bassett responded to an email asking for an interview for the Jibboom Five Year Review. Kevin provided a short background. Mr. Bassett was aware of the site since he had been involved in managing work related to abandoning some piping around the northwestern portion of the former PG&E building in 2004-2005. They had coordinated with DTSC regarding the existing Land Use Restrictions on this property. Mr. Bassett mentioned that they had encountered some hydrocarbons at approximately 12 foot depth on the PG&E property, associated with old piping for this generating plant. Mr. Bassett agreed to provide EPA with the report for this project. He also informed me that in 2006 the City of Sacramento completed the abandonment of piping from the former water intake structure along the northern border of the PG&E property.</p> <p>We discussed the levee system and potential impacts of the Jibboom site. The SAFCA was instrumental in building up the base for Jibboom Street during the process of buttressing (widening) the levee. The slope on the water side is steeper than desired and can be subject to erosion. Part of the solution was to reinforce the land side of the levee, and they expect to add rock or vegetation to the face of the water side to prevent erosion. This reinforcement and other maintenance activities include measures to prevent burrowing wildlife from compromising the levee.</p> <p>Mr. Bassett did not envision an impact of potential Institutional Controls on SAFCA activities. Contractors working on the levees are required to maintain worker awareness of any potential hazards. For any utilities that might cross the levees, such as a recent sewer interceptor project, directional borings deep below the river (70 to 80 feet below the invert depth) would avoid penetrating the levee.</p> <p>Mr. Bassett indicated that information about the Five Year Review, such as the draft Five Year Review Report, could be sent to his attention. He also suggested a couple of other contacts at other agencies and he agreed to send me their contact information.</p>		
Page 1 of 1		

INTERVIEW RECORD		
Site Name: Jibboom Junkyard		EPA ID No.: CAD980737613
Subject: Five-Year Review for Jibboom Junkyard		Time: 1:45 pm Date: 06/27/2007
Type: Telephone <u>Visit</u> Other		Incoming Outgoing
Location of Visit: CalTrans Offices, Sacramento		
Contact Made By:		
Name: Kevin Mayer	Title: RPM	Organization: US EPA Region IX
Individuals Contacted:		
Name: Ranny Eckstrom Richard Bailey Scott Nelson, and others via phone	Title: Supervisor and Staff; Environmental Engineering, Office of Hazardous Waste and Noise	Organization: State of California, Department of Transportation
Telephone No: (916) 653-1303		Street Address: MS 27, 1120 N St City, State, Zip: Sacto, CA 95814 PO Box 942874, Sacto CA 94274-0001
Fax No:		
E-Mail Address: ranny_eckstrom, rich_bailey, and scott-nelson@dot.ca.gov		
Summary Of Conversation		
<p>Mr. Nelson set up a conference with his supervisor (Ms. Eckstrom) and a senior engineer (Mr. Bailey) in CalTrans' Hazardous Waste Office. Kevin explained that EPA feels there is currently no exposure, and that the ROD acknowledged that the CalTrans right-of-way constituted an "...effective cap for sites containing inorganic wastes such as...Jibboom." After a description of the Jibboom Site, the actions taken and the objectives of the Five Year Review, we held a productive discussion of the options available for ensuring that CalTrans planners and maintenance groups are aware of the potential for lead- and PCB-contaminated soil in this area. The CalTrans officials were also interested in how they could ensure that this information is communicated to external entities seeking encroachment permits, for example for installing utility lines through the right-of-way. This office supports the entire Department, State-wide. The Jibboom Site is in CalTrans' District 3, so many of the options involve District personnel.</p> <p>By telephone, we contacted Barry Cohen, an official in the Right-of-way office at Caltrans, and discovered that the property tracking system is not an appropriate mechanism for a number of reasons. We then contacted Shree Edwards of the Maintenance office who told us that their Integrated Maintenance Management System (IMMS) is an electronic system with a flag for notifying all maintenance crew for environmentally sensitive sections of CalTrans property. Checking the IMMS is a required step for all maintenance activities, and would seem to be an ideal Institutional Control for alerting CalTrans maintenance personnel. The Hazardous Waste Office will follow up on this approach.</p>		
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Summary Of Conversation (continued)

For major internal projects (e.g., freeway expansion), there is an Initial Site Assessment process that might be adapted for an Institutional Control for sites like Jibboom. The Hazardous Waste Office will explore this method with their Design office.

The appropriate contact in the Permits office was not available to discuss mechanisms for flagging this property for external encroachment permits. (continued)

CalTrans was interested whether there might be other EPA sites that could constitute a legacy of hazardous material on CalTrans Right-of-Way. Kevin knew of groundwater plumes that cross beneath Right-of-Way, but that CalTrans activities would not typically disturb the aquifer. EPA may want to check for any sites that would be useful for the CalTrans Hazardous Waste Office to track.

Kevin expressed his desire to accomplish the Institutional Control through existing CalTrans processes. EPA discovered that CalTrans right-of-way does not have standard deeds recorded with the County Assessor and their own property control system is not conducive to property-deed-based Land Use Controls. Kevin also expressed preference for accomplishing the controls without making formal changes to the Record of Decision, although we would consider that route if it would help CalTrans justify their effort.

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Appendix C



Riverfront high-rise pitched at old power plant

Sacramento Business Journal - February 15, 2006

by [Mark Anderson](#)

Staff writer

Sacramento's City Council members liked what they saw when plans were unveiled for a 15-story condominium building between Jibboom Street and the banks the Sacramento River north of Old Sacramento. Now they want details.

The condominium would be a high-profile project just off Interstate 5. It would be nearly twice the height of the eight-story Embassy Suites in Old Sac, and would include sweeping architectural flourishes along its roofline.

"This is pushing the envelope a little bit for Sacramento, but it is time we did it," said Steve Cohn, Sacramento city councilman, at a meeting Tuesday night where the proposal was discussed.

"This is catalyst development that will tie Richards Boulevard and the riverfront together," said Ray Tretheway, councilman for the area which includes the proposed development. Richards Boulevard and the old Southern Pacific railyard are poised for development along Sacramento's waterfront. This would be one of the few developments right at the levee.

The 200-unit condominium is part of a plan to renovate the city-owned power plant on Jibboom Street, built in 1912 but long empty. The condo complex would include an amphitheater, a small park, river access and parking. What exactly would happen to the power plant has yet to be worked out.

"We've got 180 days to talk to a lot of people and do a lot of planning," said David Mogavero, principal of Mogavero Notestine Associates, architect on the project.

The condominium would include architectural references to the Jibboom Street plant and the 2-year-old water pumping station that the city opened to public access last year.

The development team of D. R. Horton Inc., Ken Fahn Properties and Mogavero Notestine got approval to negotiate with the city exclusively over the next 180 days.

The city last year sought contenders to develop the historic power plant just north of downtown. This group won based on its successful record of completing projects and its financial capabilities.

Fort Worth, Texas-based D. R. Horton (NYSE: DHI) is the largest home builder in the United States, delivering more than 51,000 homes in its fiscal year ended Sept. 30, 2005. The company was founded in 1978 and now has operations in 26 states. Locally it is building 26 subdivisions from Elk Grove to Lincoln, and is slated to build a high-rise condominium at 7th and I streets downtown.

The group's original plan for the power plant building was to create a performance venue and several restaurants inside. The city's staff and the council have conflicting ideas of what to do with the building.

City staff is still seeking a museum of some sort or a similar public attraction, said Celia Yniquez, senior project manager.

"I wouldn't want to see something in there that was only open from 10 a.m. to 5 p.m.," Trethewey said, adding that if it was turned into a museum, there is potential it would close for the evenings. "I would hate to see it go dark (at night)," he said.

The power plant has been vacant for 40 years. The building and the 6.5 acres of land around it are owned by the city. The developers, as part of their initial proposal, would provide parking inside the condo structure for residents and 80 parking spaces for public access. They also suggested converting Jibboom Street there to provide 150 diagonal parking spaces. No parking now is allowed on Jibboom.

The developers were not seeking any subsidy from the city for the condominium structure. That debate remains open concerning the power plant building, which likely will need retrofitting.

No matter what happens to the power plant building, its outside look would remain the same, Mogavero said.

Figure 1. Geographical location of the Jibboom Junkyard site, Jibboom Park property. 1980 Map.

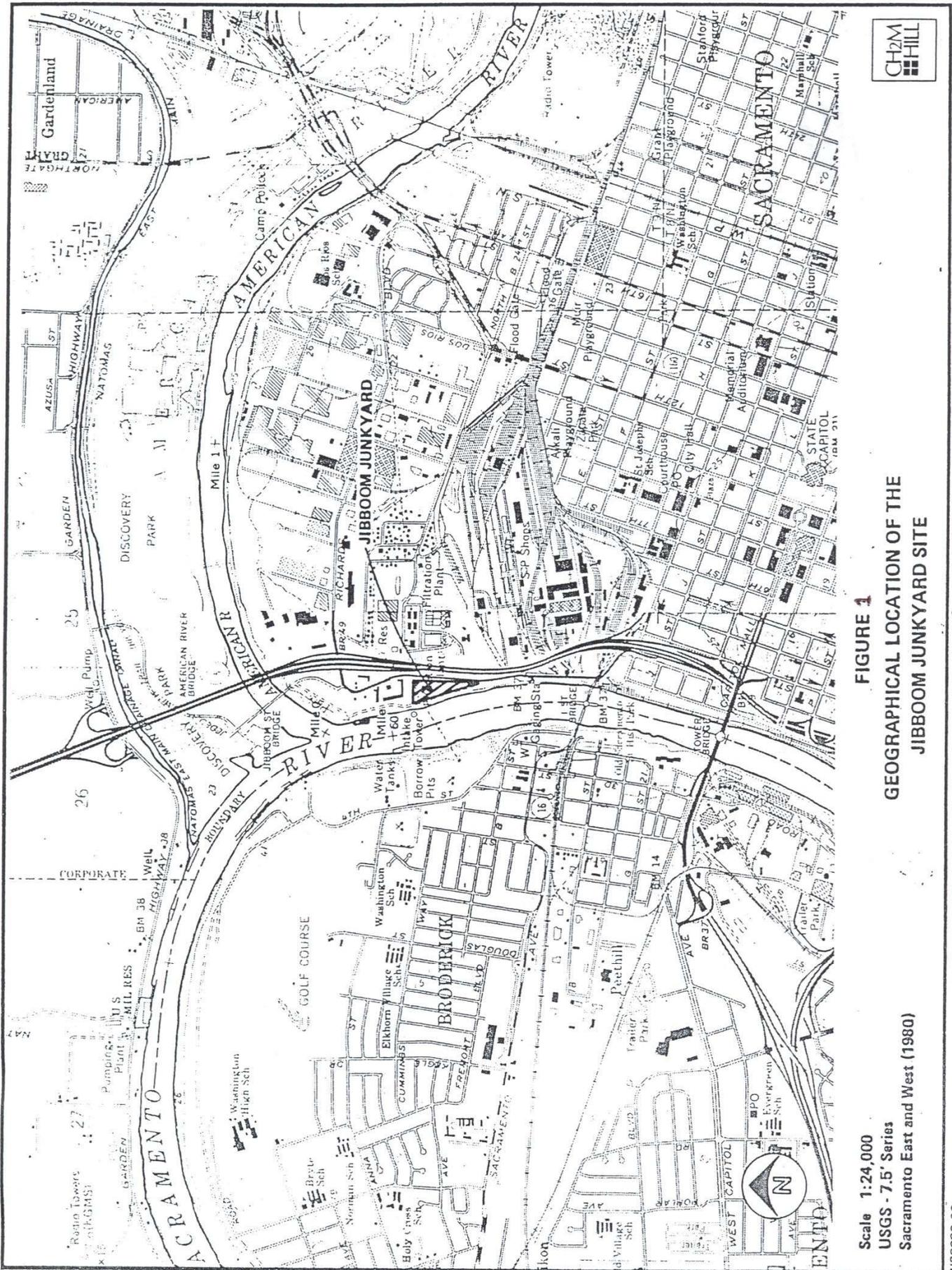


FIGURE 1
GEOGRAPHICAL LOCATION OF THE
JIBBOOM JUNKYARD SITE

Scale 1:24,000
 USGS - 7.5' Series
 Sacramento East and West (1980)



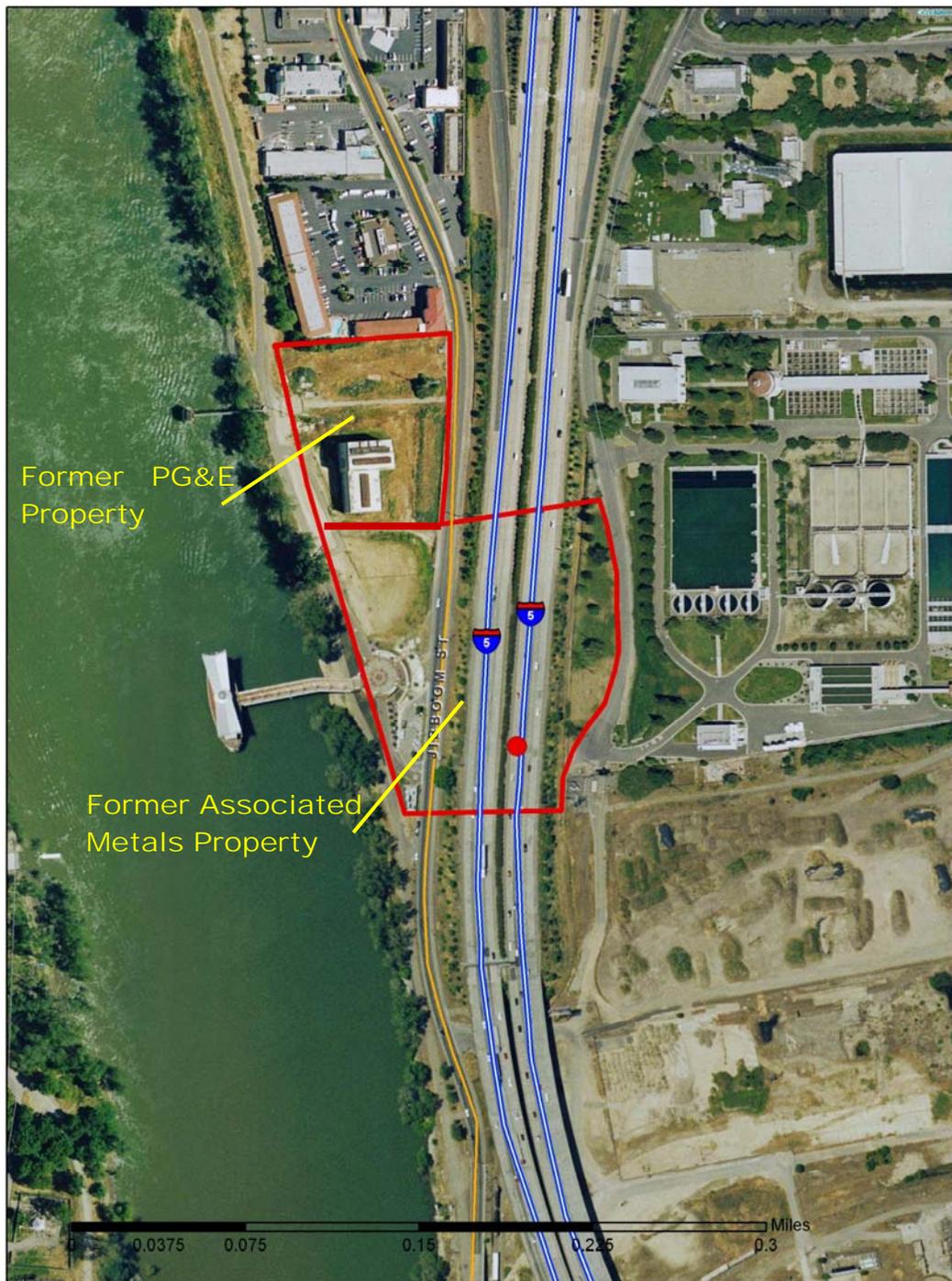
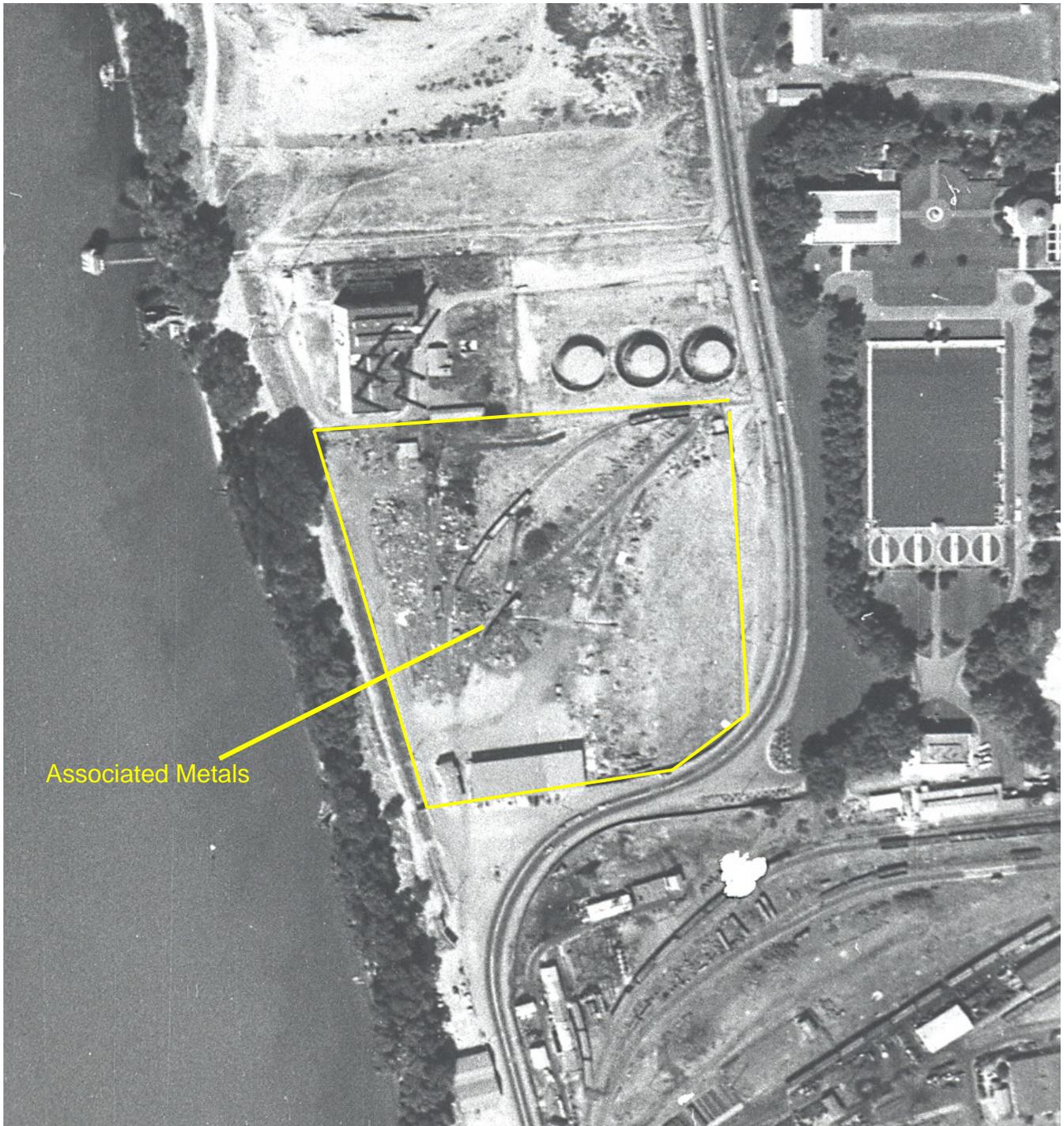


Figure 2. Jibboom Site, 2006 Photo. Levee and bike trail along Sacramento River with recently-constructed water intake structure forms the eastern border. The former PG&E building is on the northern boundary. The Sacramento Water Treatment Plant is directly east of the site, with Southern Pacific Rail Yard property south of the water treatment plant. A majority of the former Associated Metals facility is beneath elevated right-of-way of the Interstate 5 freeway and Jibboom Street.



Associated Metals

Figure 3. Jibboom Junkyard, September 15, 1957. Sacramento River is to the west, the PG&E generating plant is to the north, the Sacramento water treatment plant is east of the scrap yard, and the Southern Pacific Rail Yards are to the south and east. Note the original routing of Jibboom Street prior to the 1965 freeway construction.

WATER PLAN LEGEND

PHASE 1 IMPROVEMENTS:

- 1 TRUCK GREEN PROMENADE W/ ACCENT SHADE TREES, DECORATIVE PAVEMENT AND SITE FURNISHINGS (BENCHES, TRASH, ETC).
- 2 HYDROSEEDED TURF RIVER GREEN.
- 3 EXISTING ON-SITE MONITORING WELL LOCATION, RETAIN & PROTECT IN PLACE.

PHASE 2 IMPROVEMENTS:

- 4 LARGE GROUP PICNIC AREA W/ FABRIC SHADE CANOPIES. AREA ULTIMATELY SIZED TO ACCOMMODATE APPROXIMATE 450 PEOPLE.
- 5 TERRACE OVERLOOK AT GROUP PICNIC AREA. OVERLOOK PLATFORM STRUCTURE, SEATING TO MATCH DESIGN AT ADJACENT INTAKE STRUCTURE.
- 6 CONCRETE ACCESS RAMP (8'-10" WIDE) FROM PARKING LOT TO LEVEE TRAIL. ACCESSIBLE TO MAINTENANCE & CATERING VEHICLES.
- 7 TURFSTONE PAVING VEHICLE ACCESS TO GROUP PICNIC AREA.
- 8 ENTRY PLAZA FROM PARKING LOT TO LEVEE TRAIL. PROVIDE SEATING, A PAVED/RAISED PLANTER WALL AND PUBLIC BENCH SEATING.
- 9 RELOCATED 96KV ELECTRICAL TRANSMISSION TOWER.
- 10 INFORMAL PICNIC AREAS.
- 11 ON-SITE PARKING LOT (95 SPACES) WITH PERMEABLE PAVEMENT SURFACING.
- 12 VEHICULAR ACCESS GATE TO PARKING LOT.
- 13 PEDESTRIAN ACCESS FROM JIBBOOM STREET TO ENTRY PLAZA.
- 14 ENHANCED PAVEMENT AT PEDESTRIAN ENTRY.
- 15 EXISTING UTILITY TOWER AND ELDERBERRY TREE TO BE RETAINED.
- 16 GROUND COVER / BARK MULCH.
- 17 EXISTING BARK BENCH ALONG JIBBOOM STREET. BENCH AND SEATING TO REMAIN DUE TO DEVELOPMENT RESTRICTIONS BASED ON EXISTING CLAY CAP.
- 18 ONE-WAY VEHICLE ACCESS TO PARKING LOT WITH GATE.
- 19 NO-NON TURF PLANTING ALONG JIBBOOM STREET.
- 20 CANOPY STREET TREES ALONG JIBBOOM STREET.
- 21 PEDESTRIAN OVERLOOK AT EXISTING INTAKE STRUCTURE ENTRY. SHADE EXPANDED DECORATIVE PATHERNS AND INTERPRETIVE SIGNAGE.
- 22 PEDESTRIAN OVERLOOK OFF OF BIKE TRAIL AT LEVEE EDGE. LOCATE OVERLOOK BETWEEN TREE CLANNING TO ENHANCE VIEW TO SACRAMENTO RIVER.
- 23 PEDESTRIAN ACCESS AND VIEWING PLATFORM TO SMALL BENCH ALONG RIVERS EDGE. PROVIDE SEATING AND BENCHES BETWEEN EXISTING RIPARIAN PLANTING TO ENHANCE VIEW TO RIVER.
- 24 RIPARIAN PLANTING ALONG RIVERS EDGE.
- 25 PROJECT DEDICATION SIGN AT ENTRY.
- 26 ENTRY RESTROOM LOCATION. PROVIDE CONCRETE PAD FOR INTERIOR PORTABLE TOILET PLACEMENT.
- 27 ONE-WAY DIAGONAL PARKING LOT (46 SPACES). PROVIDE PERMEABLE PAVING ABOVE EXISTING CLAY CAP AREA.
- 28 BUILT IN CONCRETE W/ LOCKABLE DOOR AT LARGE GROUP PICNIC AREA. DESIGNED TO MATCH ADJACENT INTAKE STRUCTURE ARCHITECTURE.
- 29 AREA IMMEDIATELY ADJACENT TO EXISTING GENERATING PLANT BUILDING TO BE REDEVELOPED WITH PERMEABLE PAVING. NON-IRRIGATED NATIVE HYDROSEED MIX FOR TEMPORARY COVERAGE.
- 30 8' TALL TUBULAR STEEL FENCE AROUND EXISTING GENERATING PLANT BUILDING. FENCE TO INCLUDE INTERPRETIVE AND MARKING SIGNS.



PRELIMINARY TREE LEGEND:



- QUERCUS RUBRA/RED OAK
- MAGNOLIA GRANDIFLORA SAMUEL SOMMER/MAGNOLIA
- PLATANUS RACEMOSA/CALIFORNIA SYCAMORE
- QUERCUS LONATA/VALLEY OAK
- RUS LANCEOLATA/AMERICAN SHIM
- WEIBULLARIA CALIFORNICA/CALIFORNIA LAUREL
- CEGROS OCCIDENTALIS/WESTERN REDBUD



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JIBBOOM STREET PARK PARK MASTER PLAN

CITY OF SACRAMENTO
DEPARTMENT OF PARKS & RECREATION
Project No. L-14001
The JIBBOOM STREET PARK
PARK MASTER PLAN
Date: February 2020
Project Number: 184111013

PUBLIC NOTICE
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BEGINS FIVE-YEAR REVIEW OF CLEANUP AT THE JIMBOOM
SUPERFUND SITE

The United States Environmental Protection Agency (U.S. EPA) is conducting a five-year review at the former Jibboom Junkyard Superfund site in Sacramento, CA. This review will evaluate whether the remedy, which was implemented in 1987, remains protective of human health and the environment. Since the original cleanup project met the existing remediation objectives by removing all exposed lead, PCBs and other metals from the site, no followup review is required. Some contaminants at levels which would likely exceed current standards for residential soil were left buried under roadways and beneath at least a foot of clean soil. However, EPA has determined that a discretionary review is appropriate to evaluate whether the remedy will remain protective, due to development plans in the neighborhood which could alter land use patterns around the site.

The area where the cleanup occurred has been developed by the City of Sacramento into a landscaped park adjacent to the Sacramento River levee and bike path. Additional clean soil has been used to raise the level of the park, providing additional protection from any remaining contamination left in the subsoil. Further additional neighborhood redevelopments are being considered.

During the review process, U.S. EPA will study information about the site and conduct a site inspection. The methods, findings and conclusions of the review will be documented in the five-year review report. A statement of protectiveness will be provided to explain whether the cleanup continues to be effective and recommend improvements, if necessary. Upon completion a copy of the final report will be placed in information repository listed below and a notice will be placed in the local newspaper.

The U.S. EPA invites the community to learn more about this review process and get involved. One way to get involved is to call Lauren Berkman, Community Involvement Coordinator or Kevin Mayer, Remedial Project Manager toll free at (800) 231-3075 to let us know how you feel about the cleanup conducted so far. You can obtain further site information from EPA's website: <http://yosemite.epa.gov/r9/sfund/overview.nsf> and click on the link for the Jibboom Junkyard Superfund Site.

INFORMATION REPOSITORY - The U.S. EPA maintains an information repository that contains the site Administrative Record, project reports and documents, fact sheets and other reference materials. The location is:

Superfund Records Center

SFD-7C

95 Hawthorne Street, Room 403

San Francisco, CA 94105

Hours: Monday to Friday, 8 am to 5 pm

(415) 536-2000



Jibboom Street and Jibboom Park, Sacramento. Park surface elevated by ten feet from original grade. View looking south, January 2007.



Jibboom Park, Jibboom Street and Elevated Interstate 5 Freeway Right-of-way . View to the south toward downtown Sacramento skyscrapers.



Jibboom Street Park fountain area, looking north toward former PG&E Power Plant built in 1912.



Northern boundary of Jibboom Street Park with former PG&E building, looking west toward Sacramento River with bicycle trail along top of the levee.



Interpretive sign on bridge to Water Supply Intake Structure from Jibboom Park. The structure was completed in 2004, including two 54-inch diameter pipes under the freeway



Water Supply intake structure in Sacramento River directly west of Jibboom Park.



Jibboom Park fountain with bridge to Sacramento River water supply intake structure.



Sacramento River levee and Jibboom Park from water supply intake structure. View to the east, with elevated I-5 freeway in the background. Bicycle trail allows cyclists to ride under the bridge or to ride to fountain area of the park.