① Scan & email to City Council and Arsenal City Group
② File paper copy + electronic copy

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Miriam Barcellona Ingenito
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Edmund G. Brown Jr.
Governor

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CITY ATTORNEY'S OFFICE
CITY OF BENICIA

October 30, 2014

Benicia International Associates
c/o Ms. Cecelia C. Fusich
Vernon Law Offices
2300 Geng Road, Suite 200
Palo Alto, California 94303-3354510

City of Benicia
c/o Ms. Heather McLaughlin
250 East L Street
Benicia, California 94510

Surplus Property Authority of the
City of Benicia
c/o Ms. Heather McLaughlin
250 East L Street
Benicia, California 94510

Dynamic Wheels, Inc.
FKA International Mfg. Co. Inc.
c/o Mr. Rodolfo Jacuzzi
Agent for Service of Process
711 Jackson Street
Benicia, California 94510

U.S. Army Corps of Engineers
c/o Ms. Alarice R. Hansberry
Assistant Division Counsel
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Benicia Industries, Inc.
Currently known as APS West Coast, Inc.
c/o C T Corporation System,
Agent for Service of Process
818 West Seventh Street, 2nd Floor
Los Angeles, California 90017

Shareholder Properties, Ltd.
c/o Mr. Dale Stringfellow
Agent for Service of Process
1997 Elm Road
Benicia, California 94510

AMENDMENT TO IMMINENT AND SUBSTANTIAL ENDANGERMENT DETERMINATION AND REMEDIAL ACTION ORDER, BENICIA INTERNATIONAL ASSOCIATES SITE, 711 JACKSON STREET, SOLANO COUNTY, BENICIA, CALIFORNIA 94510

Dear Ladies/Gentlemen:

The Department of Toxic Substances Control (DTSC) is issuing the attached Amendment to the Imminent and Substantial Endangerment Determination and Remedial Action Order (Amendment) (Docket No. I/SE RAO 13/14-007) to you as a responsible party. DTSC previously issued the original order (Order, attached to the Amendment) to Benicia International Associates, the U.S. Army Corps of Engineers, and the City of Benicia, as the responsible parties.

Based on recently received information, DTSC has identified additional responsible parties, and is therefore now naming them in the attached Amendment to add them to the Order. Between the U.S. Army's sale of the property and the current owner's purchase of the property, the site was owned and/or operated by additional entities, namely: Surplus Property Authority of the City of Benicia, a California public corporation; Benicia Industries, Inc., a California corporation; International Mfg. Co. Inc., a California corporation; and Shareholder Properties, Ltd., a Liquidating Partnership, a California limited partnership.

If you wish to discuss the Order, please contact the Project Manager, Mr. Martin Herrmann, at (916) 255-3592 or martin.herrman@dtsc.ca.gov.

Sincerely,

Charlie Ridenour

Charlie Ridenour
Branch Chief
Brownfields and Environmental Restoration Program

Attachments: Amendment to Imminent and Substantial Endangerment Determination and Remedial Action Order, I/SE RAO 13/14-007

Imminent and Substantial Endangerment Determination and Remedial Action Order, I/SE RAO 13/14-007

cc: (by email)

Mr. James. C. Austreng
Acting FUDS Program Manager
U.S. Army Corps of Engineers
James.C.Austreng@usace.army.mil

cc: Mr. Joshua Holmes
Assistant Division Counsel
U.S. Army Corps of Engineers
Joshua.R.Holmes@usace.army.mil

Mr. Mark A. Rigau, (ENRD)
Senior Trial Counsel
U.S. Dept. of Justice
Mark.Rigau@usdoj.gov

Mr. John Meyer
Counsel for Benicia International Associates
john.meyer@vernonlawoffice.com

Ms. Dana Dean
Counsel for Benicia Industries, Inc.
Dana@Danadean.com

Ms. Vivian S. Murai
Senior Attorney
Office of Legal Counsel
Department of Toxic Substances Control
Vivian.Murai@dtsc.ca.gov

Mr. Noel Shrum
Unit Chief
Military Sites and Correction Action Unit
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
Noel.Shrum@dtsc.ca.gov

cc: Mr. Martin Herrmann, P.E.
Project Manager
Military Sites and Correction Action Unit
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
Martin.Herrmann@dtsc.ca.gov

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of: 711 and 750 Jackson Street Benicia, California 94510 Solano County Assessor's Parcel Number 0080-14-0440 Respondents: Benicia International Associates c/o Marc Jacuzzi P.O. Box 885 Benicia, California 94510 U.S. Army Corps of Engineers c/o James Austreng 1325 J Street Sacramento, California 95814 City of Benicia c/o Heather McLaughlin 250 East L Street Benicia, California 94510 et al	Docket No. I/SE RAO 13/14-007 AMENDMENT TO IMMINENT AND SUBSTANTIAL ENDANGERMENT DETERMINATION AND REMEDIAL ACTION ORDER Health and Safety Code Sections 25358.3(a), 25355.5(a) (1) (B), 58009, and 58010

The Imminent and Substantial Endangerment Determination and Remedial Action Order, Docket No. I/SE RAO 13/14-007, attached to this amendment is hereby amended as follows on the Date of Amendment Issuance below.

I. Section 1.1 is amended to read as follows:

1.1 Parties: The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) issues this Imminent and Substantial Endangerment Determination and Remedial Action Order (Order) to Benicia International Associates (BIA), a California limited partnership; U.S. Army Corps of Engineers, a federal agency; the City of Benicia, a municipality; Surplus Property Authority of the City of Benicia, a California public corporation; Benicia Industries, Inc., a California corporation; International Manufacturing Co., Inc., a California corporation; Shareholder Properties, Ltd., A Liquidating Partnership, a California limited partnership.

II. Section 2 is amended to replace 2.1.3, and to add paragraphs 2.1.4 through and including 2.1.7, as follows:

2.1.3 BIA, a California limited partnership, is also an RP based on ownership. BIA currently owns the property and has owned it since February 27, 1981. BIA took title to the property from the International Manufacturing Company, Inc. (see 2.1.6) and developed the property for use as a self-service storage facility known as Benicia MiniStorage.

2.1.4 The Surplus Property Authority of the City of Benicia, a California public corporation, is an RP based on ownership of the property from 1965 to 1975 when release(s) to the environment occurred or continued. The Authority leased the property to Benicia Industries, Inc. on January 7, 1964.

2.1.5 Benicia Industries, Inc., a California corporation, currently known as APS West Coast, Inc., a California corporation, is an RP based on its possession and control of the property as Lessor pursuant to a master lease dated January 7, 1964, as well as its former ownership of the property when release(s) to the environment occurred or continued. Benicia Industries, Inc. bought the Site on June 11, 1975 from the City's Surplus Property Authority. Benicia Industries sublet the property beginning on December 1, 1966 to International Manufacturing Co., Inc. (see 2.1.6).

2.1.6 International Manufacturing Company, Inc., a California corporation, (originally incorporated in 1955 and subsequently known as Dynamic Wheels, Inc.) is an RP based on its possession and control of the property as a sub-lessee of the property pursuant to two subleases dated December 1, 1966 and December 1, 1967 when release(s) to the environment occurred or continued. Between 1966 and 1980, the property uses included at various times, a facility for the manufacture, assembly and sale of swimming pool/spa equipment as well as the manufacture and sale of aluminum wheels for automobiles. Solvents may have been used to degrease the aluminum wheels.

2.1.7 Shareholder Properties, Ltd., a Liquidating Partnership, a California limited partnership, is an RP based on its former ownership of the property when release(s) to the environment occurred or continued. Shareholder Properties, Ltd. acquired the property from Benicia Industries, Inc. on March 20, 1979, and sold it on February 19, 1981 to International Manufacturing Co., Inc., a California corporation (formerly known as Dynamic Wheels, Inc., which incorporated on January 26, 1979; not the entity in 2.1.6). The property was sold to Benicia International Associates, LP on February 25, 1981.

III. Section 6.0 is amended to replace 6.5 as follows:

6.5 Submittals of this Order. All submittals and notifications from Respondent(s) required by this Order shall be sent to:

Charlie Ridenour
Branch Chief
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826
Attention: Martin Herrmann
Project Manager

DATE OF AMENDMENT ISSUANCE: Oct. 30, 2014

Charlie Ridenour

Charlie Ridenour
Branch Chief
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826

Attachment: Imminent and Substantial Endangerment Determination and Remedial Action Order Docket No. I/SE RAO 13/14-007

Matthew Rodriquez
Secretary for
Environmental Protection

Department of Toxic Substances Control

Miriam Barcellona Ingenito
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Edmund G. Brown Jr.
Governor

June 24, 2014

Benicia International Associates
c/o Mr. Rodolfo Jacuzzi
PO Box 885
Benicia, California 94510

U.S. Army Corps of Engineers
c/o Mr. Gerald Vincent
1325 J Street
Sacramento, California 95814

City of Benicia
c/o Ms. Heather McLaughlin
250 East L Street
Benicia, California 94510

BENICIA INTERNATIONAL ASSOCIATES SITE, 711 JACKSON STREET, SOLANO COUNTY, BENICIA, CALIFORNIA 94510

Dear Ladies/Gentlemen:

With this letter, please find attached the Department of Toxic Substances Control's Imminent and Substantial Endangerment Determination and Remedial Action Order (Order) for the Benicia International Associates property also known as 711 Jackson Street, Benicia, California and as Solano County Assessor's Parcel Number 0080-14-0440. The Department is issuing this Order to the Benicia International Associates, the U.S. Army Corps of Engineers, and the City of Benicia as the responsible parties to undertake the necessary remedial actions in response to a release of hazardous substances at the Benicia International Associates Site, a former Benicia Arsenal U.S. Army facility known as Building 165. The Order specifies the process for characterizing the nature and extent of contamination, analyzing the potential remedial alternatives, selecting the appropriate remedy and implementing that remedy. The Department is prepared to oversee the work conducted under this Order.

Please note that the first deadlines in the Order are 15, 30, and 35 days from the Effective Date of the Order. If you wish, you may also contact our staff at the number(s) listed below to schedule a meeting to discuss the Order.

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Please direct any questions regarding this matter, to our Project Manager, Mr. Martin Herrmann, at (916) 255-3592. Our Senior Attorney, Ms. Vivian Murai at (916) 327-4488 is the appropriate contact for questions from your legal counsel.

Sincerely,

Charlie Ridenour
Branch Chief
Cleanup Program – Sacramento Office
Brownfields and Environmental Restoration Program

Enclosure

cc: (By email)

Ms. Vivian S. Murai
Senior Attorney
Office of Legal Counsel
Department of Toxic Substances Control
1001 I Street
P.O. Box 806
Sacramento, California 95812-0806

Mr. Noel Shrum, Chief
Military Sites and Correction Action Unit
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826

Mr. Martin Herrmann, P.E.
Project Manager
Military Sites and Correction Action Unit
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of: 711 and 750 Jackson Street Benicia, California 94510 Solano County Assessor's Parcel Number 0080-14-0440 Respondents: Benicia International Associates c/o Marc Jacuzzi PO Box 885 Benicia, California 94510 U.S. Army Corps of Engineers c/o Gerald Vincent 1325 J Street Sacramento, California 95814 City of Benicia c/o Heather McLaughlin 250 East L Street Benicia, California 94510	Docket No. I/SE RAO 13/14-007 IMMINENT AND SUBSTANTIAL ENDANGERMENT DETERMINATION AND REMEDIAL ACTION ORDER Health and Safety Code Sections 25358.3(a), 25355.5(a) (1) (B), 58009, and 58010

I. INTRODUCTION

1.1 Parties. The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) issues this Imminent and Substantial Endangerment Determination and Remedial Action Order (Order) to the Benicia International Associates (BIA), a California limited liability company, the United States Army (Army), and the City of Benicia (the City).

1.2 Property/Site. This Order applies to the property located at 711 and 750 Jackson Street, Benicia, California 94510, in Solano County. The property consists of 5.66 acres and is identified by Solano County Assessor's Parcel Number 0080-14-0440. The property is a portion of the Industrial Area (Industrial Area) of the Former Benicia Arsenal (Arsenal), and is in the southern most area of the Arsenal. Maps showing the property are attached as Exhibit A. This Order applies to the property and the areal extent of contamination that resulted from activities on the property (hereinafter, the "Site").

1.3 Jurisdiction. This Order is issued by DTSC to Respondents pursuant to its authority under Health and Safety Code sections 25358.3(a), 25355.5(a)(1)(B), 58009 and 58010.

Health and Safety Code section 25358.3(a) authorizes DTSC to take various actions, including issuance of an Imminent or Substantial Endangerment Determination and Order, when DTSC determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or a threatened release of a hazardous substance.

Health and Safety Code section 25355.5(a)(1)(B) authorizes DTSC to issue an order establishing a schedule for removing or remedying a release of a hazardous substance at a site, or for correcting the conditions that threaten the release of a hazardous substance. The order may include, but is not limited to requiring specific dates by which the nature and extent of a release shall be determined and the site adequately characterized, a remedial action plan prepared and submitted to DTSC for approval, and a removal or remedial action completed.

Health and Safety Code section 58009 authorizes DTSC to commence and maintain all proper and necessary actions and proceedings to enforce its rules and regulations; to enjoin and abate nuisances related to matters within its jurisdiction which are dangerous to health; to compel the performance of any act specifically enjoined upon any person, officer, or board, by any law of this state relating to matters within its jurisdiction; and/or on matters within its jurisdiction, to protect and preserve the public health.

Health and Safety Code section 58010 authorizes DTSC to abate public nuisances related to matters within its jurisdiction.

II. FINDINGS OF FACT

DTSC hereby finds:

2.1 Liability of Respondent(s). Respondent(s) is a responsible party or liable person as defined in Health and Safety Code section 25323.5.

2.1.1 The Army is a responsible party (RP) based on its ownership and operation of the Arsenal for approximately 115 years through 1964 and specifically operations at the Site beginning in 1945 for vehicle repairs involving the use of two gas-fired boilers, areas for sand blasting and painting, and metal processing dip tanks for caustic, rinse, pickle, oil bath and degreaser treatments. Onsite underground fuel tanks stored petroleum products for motor vehicles and boilers. When the Army owned and operated the Site, both the sewer and storm drain systems discharged domestic and industrial wastes without treatment directly to the Carquinez Strait.

2.1.2 The City is an RP based on its former ownership of the Site and of the drains there. The City bought the property in 1965, and subsequently parceled, leased and sold them for use by various industries. During both the federal and local

governments' ownership, the sewer and storm drains at the property directed draining contaminants to the Carquinez Straits. The City modified and diverted the sewer outfall (but not the storm drains) to its sewage treatment system around 1969-70. As late as 2004, trichloroethylene (TCE) and its breakdown products continued to release to the Straits.

2.1.3 BIA is also an RP based on ownership and operations. BIA currently owns the property and has owned it since August of 1995. It took title to the property directly from the City, and either leased or purchased this property from the City since the Army left in the 1960's. BIA is a California limited liability company that bought the property. As was the custom prior to the 1970s, operators throughout the Arsenal discharged untreated waste into the sewer and/or storm drain system. Between 1966 and 1981, the BIA building was used for office space, storage and as a facility for the manufacture of aluminum wheels for automobiles (International Manufacturing, now defunct) and installation of fiberglass truck beds on pickup trucks. Solvents may have been used to degrease the aluminum wheels and for working with the fiberglass resins.

2.2 Physical Description. The BIA property subject to this order is located west of the end of Jackson Street and is roughly bounded by residential property along Military East and East 7th Streets to the north and west and a large paved parking area for imported vehicle storage to the south. The property includes the former Army building 165 which is about 40,000 square feet, as well as former Army buildings 90 and 156. The Site is located on a transition of rocky highlands to the north and relatively flat lowlands to the southwest. Storm water drains provide a conduit to the Carquinez Strait. The property is approximately 500 yards north of the Strait and separated from the Strait by a large parking area and Bayshore Road. The groundwater is shallow (less than 10 feet below ground surface) and contaminated with volatile organic compounds (VOCs). The contamination follows the flow of groundwater toward the lowlands and can volatilize to present a vapor intrusion risk.

2.3 Site History. The Site is one parcel among the many that comprise the former Benicia Arsenal. The largest building on the Site is Building 165. Building 165 was used by the Army for vehicle repairs and included two gas fired boilers and processing tanks for caustic, rinse, pickle, oil bath, and degreaser operations. All the dip tanks have been removed. Between 1966 and 1981, the building was used for office space and as a facility for the manufacture and storage of equipment for pumps, water systems, swimming pools, automobile wheels and fiberglass pick-up truck beds. The aluminum wheel process included pouring the aluminum into a form then grinding and cleaning the wheel. The location and exact chemicals used in the area are unknown. Currently, Building 165 is divided into hundreds of storage areas.

2.3.1 The Arsenal itself was established in 1849 and had several missions throughout its 115-year history. The Arsenal totaled 2,728 acres and consisted of approximately 300 buildings, two motor pools, NIKE missile repair facilities, an explosive holding area, and a network of 109 munitions storage "igloos." The Arsenal functioned as a site for storage, disposal, repair, and testing various military munitions and weaponry, including munitions and explosives of concern.

2.3.2 The Army closed the Arsenal in 1964 and sold it to the City for six million dollars. Benicia Industries Inc., a private developer, funded the purchase in exchange for a 66-year master lease for the development and operation of the Arsenal properties as an industrial area for the City. At this point, the Army designated the Arsenal as a formerly used defense site, and delegated the responsibility and authority to investigate and remediate the Arsenal to the United States Army Corps of Engineers (USACE).

2.3.3 In 1998, the USACE initiated Arsenal investigation activities that included the Industrial Area pursuant to the Defense and State Memorandum of Agreement with the State of California which allows for State input, but not oversight, of remedial activities at the Arsenal. The USACE has completed several investigations including several underground storage tank removal actions at surrounding parcels near the property. For the Site, the USACE recommended a risk evaluation for Building 165, but did not conduct Removal/Remedial Actions pursuant to Amy policy, because subsequent property owners had "beneficially reused" the properties and may have caused additional contamination. USACE's consultant Brown and Caldwell recommended a risk evaluation be done for Building 165 in the Expanded Site Inspection Report as further described in section 2.4 below.

2.3.4 The City took possession of, and currently owns and controls the sewer and storm drain systems. The Arsenal's sewer and storm drain systems discharged all domestic and industrial wastes without treatment directly into the Carquinez Strait during Army and City ownership until late 1969 or 1970 when the sewer system outfall was diverted to the City treatment system. The Brown and Caldwell letter report to the USACE titled "Storm Drain Investigation Letter Memorandum, Former Benicia Arsenal, Benicia, California, dated December 7, 2004, documents that the storm drain system releases TCE and its biodegradation breakdown products to the Carquinez Strait.

2.4 Hazardous Substances Found at the Site. The Expanded Site Inspection Report, which was prepared by Brown & Caldwell for US Army Corps of Engineers and dated September 2005, concluded that contamination was found at the Site. Groundwater contamination with the VOCs TCE, cis-1,2-dichloroethene (1,2 DCE) and vinyl chloride have been measured at concentrations of up to 32,000 micrograms per liter (µg/L), 46,000 µg/L and 4,600 µg/L, respectively. The groundwater contamination appears to be centered along the southwest wall of building 165 and to have migrated off site into the lowlands to the south and southwest.

2.5 Health Effects.

2.5.1 Volatile Organic Chemicals.

2.5.1.1 Trichloroethylene (TCE): Breathing large amounts of TCE may cause impaired heart function, unconsciousness, and death. Breathing it for long periods may cause nerve, kidney, and liver damage. Breathing TCE has been linked to fetal developmental defects (cardiac malformations) that occur when the mother is exposed to TCE during the first trimester of pregnancy. Drinking large amounts of TCE may cause nausea, liver damage, unconsciousness, impaired heart function, or death.

Drinking small amounts of TCE for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women. TCE is considered to be a human carcinogen.

2.5.1.2 cis-1,2-Dichloroethene (1,2 DCE). Breathing large amounts of 1,2 DCE may cause impaired heart function, unconsciousness, and death. Breathing it for long periods may cause nerve, kidney, and liver damage. Drinking large amounts of 1,2 DCE may cause nausea, liver damage, unconsciousness, impaired heart function, or death. Drinking small amounts of 1,2 DCE for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women. 1,2 DCE is likely to be a human carcinogen.

2.5.1.3 Vinyl Chloride (VC). VC is a volatile decomposition product of the chlorinated ethenes (TCE and 1,2 DCE) which is more toxic than the parent materials. Its volatility increases the potential to make it a major vapor intrusion concern in enclosed areas (such as buildings). Breathing VC for long periods may cause nerve, blood, lymphatic, respiratory and liver damage. VC is a known carcinogen.

2.6 Routes of Exposure.

2.6.1 Solvents and Volatile Chemicals. The primary route for this class of materials is vapor inhalation. Other routes require contact with groundwater or disturbed soil at this site.

2.6.1.1 TCE: Routes of exposure are through inhalation, skin contact or ingestion.

2.6.1.2 1,2 DCE. Routes of exposure are through inhalation, skin contact or ingestion.

2.6.1.3 VC. Routes of exposure are through inhalation, skin contact or ingestion.

2.7 Public Health and/or Environmental Risk. The Site is currently in commercial use as storage units. Occupants at the Site could be exposed to the solvents through the inhalation of vapors that can buildup below buildings and intrude into the indoor air and construction workers could be exposed to solvents where the soil or ground water is exposed by construction activities.

The Site is located within the Industrial Area which is currently a mixed use zone, primarily for light/heavy industrial purposes, with some residential occupancy (not on the property). In 2009 The City released for public comment and review a "Lower Arsenal Mixed Use Specific Plan and EIR" that proposes to increase residential occupancy of the Lower Arsenal at nearby parcels in the highlands. The Site is at the interface of the highlands to the north and the lowlands to the south. While the Site is in a light industrial/commercial use area, the adjacent properties to the north are residential. It is less likely that the groundwater contamination would affect the adjacent residential areas as the groundwater flows in a southerly direction.

Groundwater at the Site is shallow (5 to 10-feet); storm drains and tidal influences likely cause releases of groundwater contaminants to the Carquinez Strait and could adversely affect the biota therein. The Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region designates the beneficial use of groundwater at the Arsenal to include domestic water supply though there are no domestic water supply wells in the Industrial Area.

III. CONCLUSIONS OF LAW

3.1 Respondent(s) is a "responsible party" or "liable person" as defined by Health and Safety Code section 25323.5.

3.2 Each of the substances listed in Section 2.4 is a "hazardous substance" as defined in Health and Safety Code Section 25316.

3.3 There has been a "release" or there is a "threatened release" of hazardous substances listed in Section 2.4 at the Site, as defined in Health and Safety Code Section 25320.

3.4 The actual and/or threatened release of hazardous substances at the Site may present an imminent and substantial endangerment to the public health or welfare or to the environment.

3.5 Response action is necessary to abate a public nuisance and/or to protect and preserve the public health.

IV. DETERMINATION

4.1 Based on the foregoing findings of fact and conclusions of law, DTSC hereby determines that response action is necessary at the Site because there has been a release and/or there is a threatened release of a hazardous substance.

4.2 Based on the foregoing findings of fact and conclusions of law, DTSC determines that there may be an imminent and/or substantial endangerment to the public health or welfare or to the environment because of the release and/or the threatened release of the hazardous substances at the Site.

V. ORDER

Based on the foregoing FINDINGS, CONCLUSIONS, AND DETERMINATION, IT IS HEREBY ORDERED THAT Respondent(s) conduct the following response actions in the manner specified herein, and in accordance with a schedule specified by DTSC as follows:

5.1 All response actions taken pursuant to this Order shall be consistent with the requirements of chapter 6.8 (commencing with section 25300), division 20 of the

Health and Safety Code and any other applicable state or federal statutes and regulations.

5.1.1 Site Remediation Strategy. The purpose of this Order is to require for the Site: implementation of any appropriate removal actions, completion of a Remedial Investigation/Feasibility Study (RI/FS), preparation of a Remedial Action Plan (RAP) or Removal Action Workplan (RAW), preparation of California Environmental Quality Act (CEQA) documents, and Design and Implementation of the remedial actions approved in the RAP or RAW. An overall Site investigation and remediation strategy shall be developed by Respondent(s) in conjunction with DTSC which reflects program goals, objectives, and requirements. Current knowledge of the Site contamination sources, exposure pathways, and receptors shall be used in developing this strategy.

An objective of the Site investigations shall be to identify immediate or potential risks to public health and the environment and prioritize and implement response actions using removal actions and operable units, if appropriate, based on the relative risks at the Site. Respondent(s) and DTSC shall develop and possibly modify Site priorities throughout the course of the investigations. If necessary for the protection of public health and the environment, DTSC will require additional response actions not specified in this Order to be performed as removal actions or separate operable units. Removal actions shall be implemented in accordance with a workplan and implementation schedule submitted by Respondent(s) and approved by DTSC.

For operable unit remedial actions, DTSC will specify the separate and focused remedial phase activities to be conducted as RI/FS, RAP or RAW, Design, and Implementation. The focused activities shall be conducted in accordance with the corresponding remedial phase requirements specified in this Order, but shall only address the area or problem of the operable unit.

5.1.2 Remedial Action Objectives. Based on available information, DTSC has preliminarily determined that the remedial action objectives for the Site shall include:

(a) Existing and potential beneficial uses of groundwater shall be protected. The Regional Water Quality Control Board Basin Plan identifies public water supply as a beneficial use of this aquifer. Therefore, drinking water standards or more conservative values determined by a Risk Assessment shall be remedial action objectives for this Site.

(b) The reasonably foreseeable future land use of the Site is industrial/commercial. Therefore, remedial action objectives for contaminated media at the Site shall be developed that are protective of adults in an industrial/commercial exposure scenario.

5.1.3 Removal Actions. Respondent(s) shall undertake removal actions if, during the course of the RI or FS, DTSC determines that they are necessary to mitigate the release of hazardous substances at or emanating from the Site. DTSC may require

Respondent(s) to submit a removal action workplan that includes a schedule for implementing the workplan for DTSC's approval. Either DTSC or Respondent(s) may identify the need for removal actions.

5.1.4 Site Remediation Strategy Meeting. The Respondents including the Project Coordinator (Section 6.1) and Project Engineer/Geologist (Section 6.2), shall meet with DTSC within 35 days from the effective date (and concurrent with the development of the RI/FS workplan) of this Order to discuss the Site remediation strategy. The discussion will include Site risks and priorities; project planning, phasing and scheduling, remedial action objectives, remedial technologies, data quality objectives, and the RI/FS workplan. Results of the discussion shall be included in the Scoping Document required under Section 5.2.2(b) of this Order.

5.2 Remedial Investigation/Feasibility Study. A RI/FS shall be conducted for the Site. The RI/FS may be performed as a series of focused RI/FSs, if appropriate, based on Site priorities (see Section 5.1.3, Operable Units). The RI/FS shall be prepared consistent with the U.S. Environmental Protection Agency's (EPA's) "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," October 1988. The purpose of the RI/FS is to assess Site conditions and to evaluate alternatives to the extent necessary to select a remedy appropriate for the Site. RI and FS activities shall be conducted concurrently and iteratively so that the investigations can be completed expeditiously. Because of the unknown nature of the Site and iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. Respondent(s) shall fulfill additional data and analysis needs identified by DTSC; these additional data and analysis requests will be consistent with the general scope and objectives of this Order.

The following elements of the RI/FS process and those defined by DTSC shall be preliminarily defined in the initial Site scoping and refined and modified as additional information is gathered throughout the RI/FS process.

(a) Conceptual Site Model identifying contamination sources, exposure pathways, and receptors;
(b) Federal, State and local remedial action objectives including applicable legal requirements or relevant and appropriate standards;
(c) Project phasing including the identification of removal actions and operable units;
(d) General response actions and associated remedial technology types; and
(e) The need for treatability studies.

5.2.1 RI/FS Objectives. The objectives of the RI/FS are to:

(a) Determine the nature and full extent of hazardous substance contamination of air, soil, surface water and groundwater at the Site;
(b) Identify all actual and potential exposure pathways and routes through environmental media;

(c) Determine the magnitude and probability of actual or potential harm to public health, safety or welfare or to the environment posed by the threatened or actual release of hazardous substances at or from the Site;
(d) Identify and evaluate appropriate response actions to prevent or minimize future releases and mitigate any releases which have already occurred; and
(e) Collect and evaluate the information necessary to prepare a RAP or RAW.

5.2.2 RI/FS Workplan. Within 60 days from the Site Remediation Strategy Meeting, Respondents shall prepare and submit to DTSC for review and approval a detailed RI/FS Workplan and implementation schedule which cover all the activities necessary to conduct a complete RI/FS of the Site.

The RI/FS Workplan shall include a detailed description of the tasks to be performed, information or data needed for each task, and the deliverables which will be submitted to DTSC. Either Respondent(s) or DTSC may identify the need for additional work.

These RI/FS Workplan deliverables are discussed in the remainder of this Section, with a schedule for implementation, and monthly reports. The RI/FS Workplan shall include all the sections and address each component listed below.

(a) Project Management Plan. The Project Management Plan shall define relationships and responsibilities for major tasks and project management items by Respondent(s), its contractors, subcontractors, consultants, and reporting relationships. The plan shall include an organization chart with the names and titles of key personnel and a description of their individual responsibilities.

(b) Scoping Document. The Scoping Document shall incorporate program goals, program management principles, and expectations contained in 40 CFR, Part 300, National Oil and Hazardous Substances Pollution Contingency Plan (NCP). It shall include:
(1) An analysis and summary of the Site background and the physical setting. At a rninimum, the following information is required:

(A) A map of the Site, and if they exist, aerial photographs and blueprints showing buildings and structures;
(B) A detailed description of past disposal practices and earthwork;
(C) A list of all hazardous substances, materials or wastes which were disposed, discharged, spilled, treated, stored, transferred, transported, handled or used at the Site, and a description of their estimated volumes, concentrations, and characteristics;
(D) A description of the characteristics of the hazardous substances at the Site; and,

(E) If applicable, a description of all current and past manufacturing processes which are or were related to each hazardous substance.

(2) An analysis and summary of previous response actions, including a summary of all existing data including air, soil, surface water, and groundwater data and the Quality Assurance/Quality Control (QA/QC) procedures which were followed;

(3) Presentation of the Conceptual Site Model;

(4) The scope and objectives of RI/FS activities;

(5) Preliminary identification of possible response actions and the data needed for the evaluation of alternatives. Removal actions shall be proposed if needed based on the initial evaluation of threats to public health and the environment. If remedial actions involving treatment can be identified, treatability studies shall be conducted during the characterization phase, unless Respondent(s) and DTSC agree that such studies are unnecessary as set forth in Section 5.4; and

(6) If applicable, initial presentation of the Site Remediation Strategy.

(c) Field Sampling and Geophysical Plan. The Field Sampling Plan shall include:

(1) Sampling objectives, including a brief description of data gaps and how the field sampling plan will address these gaps;
(2) Sample locations, including a map showing these locations, and proposed frequency;
(3) Sample designation or numbering system;
(4) Detailed specification of sampling equipment and procedures;
(5) Sample handling and analysis including preservation methods, shipping requirements and holding times; and
(6) Management plan for wastes generated.

(d) Quality Assurance Project Plan. The plan shall include:

(1) Project organization and responsibilities with respect to sampling and analysis;
(2) Quality assurance objectives for measurement including accuracy, precision, and method detection limits. In selecting analytical methods, Respondent(s) shall consider obtaining detection limits at or below potentially applicable legal requirements or relevant and appropriate standards, such as Maximum Contaminant Levels (MCLs) or Maximum Contaminant Level Goals (MCLGs);
(3) Sampling procedures;
(4) Sample custody procedures and documentation;
(5) Field and laboratory calibration procedures;

(6) Analytical procedures;
(7) Laboratory to be used certified pursuant to Health and Safety Code Section 25198;
(8) Specific routine procedures used to assess data (precision, accuracy and completeness) and response actions;
(9) Reporting procedure for measurement of system performance and data quality;
(10) Data management, data reduction, validation and reporting, including any computer algorithms. Information shall be accessible to downloading into DTSC's system; and
(11) Internal quality control.

(e) Health and Safety Plan. A Site-specific Health and Safety Plan shall be prepared in accordance with federal (29 CFR 1910.120) and state (title 8 California Code of Regulations, section 5192) regulations and shall describe the following:

(1) Site Background/History/Workplan;
(2) Key Personnel and Responsibilities
(3) Job Hazard Analysis/Summary;
(4) Employee Training;
(5) Personal Protection;
(6) Medical Surveillance;
(7) Air Surveillance;
(8) Site Control;
(9) Decontamination;
(10) Contingency Planning;
(11) Confined Space Operations;
(12) Spill Containment;
(13) Sanitation;
(14) Illumination; and
(15) Other applicable requirements based on the work to be performed.

All contractors and all subcontractors shall be given a copy of the Health and Safety Plan prior to entering the Site. Any supplemental health and safety plans prepared by any subcontractor shall also be prepared in accordance with the regulations and guidance identified above. The prime contractor will be responsible for ensuring that all subcontractor supplemental health and safety plans will follow these regulations and guidelines.

(f) Other Activities. A description of any other significant activities which are appropriate to complete the RI/FS shall be included.

(g) Schedule. A schedule which provides specific time frames and dates for completion of each activity and report conducted or submitted under the RI/FS Workplan including the schedules for removal actions and operable unit activities.

5.2.3 RI/FS Workplan Implementation. Respondent(s) shall implement the approved RI/FS Workplan.

5.2.4 RI/FS Workplan Revisions. If Respondent(s) proposes to modify any methods or initiates new activities for which no Field Sampling Plan, Health and Safety Plan, Quality Assurance Project Plan or other necessary procedures/plans have been established, Respondent(s) shall prepare an addendum to the approved plan(s) for DTSC review and approval prior to modifying the method or initiating new activities.

5.3 Interim Screening and Evaluation of Remedial Technologies. At the request of DTSC, Respondent(s) shall submit an interim document which identifies and evaluates potentially suitable remedial technologies and recommendations for treatability studies.

5.4 Treatability Studies. The Department may require the Respondents to perform treatability testing to develop data for the detailed remedial alternatives. Treatability testing is required to demonstrate the implementability and effectiveness of technologies, unless Respondent(s) can show DTSC that similar data or documentation or information exists. The required deliverables are: a workplan, a sampling and analysis plan, and a treatability evaluation report. To the extent practicable, treatability studies will be proposed and implemented during the latter part of Site characterization.

5.5 Remedial Investigation (RI) Report. The RI Report shall be prepared and submitted by Respondent(s) to DTSC for review and approval in accordance with the approved RI/FS workplan schedule. The purpose of the RI is to collect data necessary to adequately characterize the Site for the purposes of defining risks to public health and the environment and developing and evaluating effective remedial alternatives. Site characterization may be conducted in one or more phases to focus sampling efforts and increase the efficiency of the investigation. Respondent(s) shall identify the sources of contamination and define the nature, extent, and volume of the contamination. Using this information, the contaminant fate and transport shall be evaluated. The RI Report shall contain:

(a) Site Physical Characteristics. Data on the physical characteristics of the Site and surrounding area shall be collected to the extent necessary to define potential transport pathways and receptor populations and to provide sufficient engineering data for development and screening of remedial action alternatives.

(b) Sources of Contamination. Contamination sources (including heavily contaminated media) shall be defined. The data shall include the source locations, type of contaminant, waste characteristics, and Site features related to contaminant migration and human exposure.

(c) Nature and Extent of Contamination. Contaminants shall be identified and the horizontal and vertical extent of contamination shall be defined in soil,

groundwater, surface water, sediment, air, and biota. Spatial and temporal trends and the fate and transport of contamination shall be evaluated.

5.6 Baseline Health and Ecological Risk Assessment. Respondent(s) shall perform health and ecological risk assessments for the Site that meet the requirements of Health and Safety Code §25356.1.5(b). Respondent(s) shall submit a Baseline Health and Ecological Risk Assessment Report within thirty (30) days from the approval of the RI Report. The report shall be prepared consistent with U.S. EPA and California Environmental Protection Agency guidance and regulations, including as a minimum: Risk Assessment Guidance for Superfund, Volume 1; Human Health Evaluation Manual, December 1989; Superfund Exposure Assessment Manual, April 1988; Risk Assessment Guidance for Superfund, Volume 2, Environmental Evaluation Manual, March 1989; Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities (DTSC, September 1993); and all other related or relevant policies, practices and guidelines of the California Environmental Protection Agency and policies, practices and guidelines developed by U.S.EPA pursuant to 40 CFR 300.400 et seq. The Baseline Health and Ecological Risk Assessment Report shall include the following components:

(a) Contaminant Identification. Characterization data shall be screened to identify contaminants of concern to focus subsequent efforts of the risk assessment process;

(b) Environmental Evaluation. An ecological assessment consisting of:

(1) Identification of sensitive environments and rare, threatened, or endangered species and their habitats; and
(2) As appropriate, ecological investigations to assess the actual or potential effects on the environment and/or develop remediation criteria;

(c) Exposure Assessment. The objectives of an exposure assessment are to identify actual or potential exposure pathways, to characterize the potentially exposed populations, and to determine the extent of the exposure. Exposed populations may include industrial workers, residents, and subgroups that comprise a meaningful portion of the general population, including, but not limited to, infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subpopulations, that are identifiable as being at greater risk of adverse health effects due to exposure to hazardous substances than the general population;

(d) Toxicity Assessment. Respondent(s) shall evaluate the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a chemical's potential carcinogenicity in humans; and,

(e) Risk Characterization. Risk characterization shall include the potential risks of adverse health or environmental effects for each of the exposure scenarios derived in the exposure assessment.

5.7 Feasibility Study (FS) Report. The FS Report shall be prepared and submitted by Respondent(s) to DTSC for review and approval, no later than forty-five (45) days from submittal of the RI Report. The FS Report shall summarize the results of the FS including the following:

(a) Documentation of all treatability studies conducted;
(b) Development of medium specific or operable unit specific remedial action objectives, including legal requirements and other promulgated standards that are relevant;
(c) Identification and screening of general response actions, remedial technologies, and process options on a medium and/or operable unit specific basis;
(d) Discussion of any required environmental and use restrictions, or other institutional controls; and,
(e) Evaluation of alternatives based on the criteria contained in the NCP including:

Threshold Criteria

(1) verall protection of human health and the environment;
(2) Compliance with legal requirements and other promulgated standards that are relevant.;

Primary Balancing Criteria

(1) Long-term effectiveness and permanence;
(2) Reduction of toxicity, mobility, or volume through treatment;
(3) Short-term effectiveness;
(4) Implementability based on technical and administrative feasibility;
(5) Cost;

Modifying Criteria

(1) State and local agency acceptance;
(2) Community acceptance; and,
(3) Other proposed remedial actions.

5.8 Public Participation Plan (Community Relations). Respondent(s) shall work cooperatively with DTSC in providing an opportunity for meaningful public participation in response actions. Any such public participation activities shall be conducted in accordance with Health and Safety Code sections 25356.1 and 25358.7,

and DTSC's most current Public Participation Policy and Guidance Manual, and shall be subject to DTSC's review and approval.

Respondent(s), in coordination with DTSC, shall conduct a baseline community survey and develop a Public Participation Plan (PPP) which describes how, under this Order, the public and adjoining community will be kept informed of activities conducted at the Site and how Respondent(s) will be responding to inquiries from concerned citizens. Major steps in developing a PPP are as follows:

(a) Develop proposed list of interviewees;
(b) Schedule and conduct community interviews; and
(c) Analyze interview notes, and develop objectives.

Respondent(s) shall conduct the baseline community survey and submit the PPP for DTSC's review within forty (40) days of the Site Remediation Strategy Meeting.

Respondent(s) shall implement any of the public participation support activities identified in the PPP, at the request of DTSC. DTSC retains the right to implement any of these activities independently. These activities include, but are not limited to, development and distribution of fact sheets; public meeting preparations; and development and placement of public notices.

5.9 California Environmental Quality Act (CEQA). DTSC will comply with CEQA for all activities required by this Order that are projects subject to CEQA. Upon DTSC request, Respondent(s) shall provide DTSC with any information that DTSC deems necessary to facilitate compliance with CEQA within thirty (30) days. The costs incurred by DTSC in complying with CEQA are response costs and Respondent(s) shall reimburse DTSC for such costs pursuant to Section 6.19.

5.10 Removal Action Workplan. If DTSC determines a removal action is appropriate, Respondent(s) will prepare and submit no later than [30] days after DTSC's approval of the FS, a draft Removal Action Workplan (RAW) in accordance with Health and Safety Code sections 25323.1 and 25356.1. The Removal Action Workplan will include:

(a) a description of the onsite contamination;
(b) the goals to be achieved by the removal action;
(c) an analysis of the alternative options considered and rejected and the basis for that rejection. This should include a discussion for each alternative which covers its effectiveness, implementability and cost;
(d) administrative record list;
(e) a description of the techniques and methods to be used in the removal action, including any excavating, storing, handling, transporting, treating, and disposing of material on or off the site;
(f) Sampling and Analysis Plan with corresponding Quality Assurance Plan to confirm the effectiveness of the RAW, if applicable;

(g) a brief overall description of methods that will be employed during the removal action to ensure the health and safety of workers and the public during the removal action. A detailed community air monitoring plan shall be included if requested by DTSC.

In conjunction with DTSC, Respondent(s) shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. DTSC will prepare a response to the public comments received. If required, the Respondent(s) shall submit within two (2) weeks of the request the information necessary for DTSC to prepare this document.

Following DTSC's finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAW. Respondent(s) shall modify the document in accordance with DTSC's specifications and submit a final RAW within [15] days of receipt of DTSC's comments.

If the proposed removal action does not meet the requirements of Health and Safety Code section 25356.1(h), the Respondent(s) will prepare a Remedial Action Plan (RAP) in accordance with Health and Safety Code section 25356.1(c) for DTSC review and approval.

5.11 Remedial Action Plan. No later than thirty (30) days after DTSC approval of the FS Report, Respondent(s) shall prepare and submit to DTSC a draft RAP. The draft RAP shall be consistent with the NCP and Health and Safety Code section 25356.1. The draft RAP public review process may be combined with that of any other documents required by CEQA. The draft RAP shall be based on and summarize the approved RI/FS Reports, and shall clearly set forth:

(a) Health and safety risks posed by the conditions at the Site;

(b) The effect of contamination or pollution levels upon present, future, and probable beneficial uses of contaminated, polluted, or threatened resources;

(c) The effect of alternative remedial action measures on the reasonable availability of groundwater resources for present, future, and probable beneficial uses;

(d) Site specific characteristics, including the potential for offsite migration of hazardous substances, the surface or subsurface soil, and the hydrogeologic conditions, as well as preexisting background contamination levels;

(e) Cost-effectiveness of alternative remedial action measures. Land disposal shall not be deemed the most cost-effective measure merely on the basis of lower short-term cost;

(f) The potential environmental impacts of alternative remedial action measures, including, but not limited to, land disposal of the untreated hazardous substances as opposed to treatment of the hazardous substances to remove or reduce their volume, toxicity, or mobility prior to disposal;

(g) A statement of reasons setting forth the basis for the removal and remedial actions selected. The statement shall include an evaluation of each proposed alternative submitted and evaluate the consistency of the removal and remedial actions proposed by the plan with the federal regulations and factors specified in subdivision (d) of H&SC Section 25356.1, if these factors are not otherwise adequately addressed through compliance with the federal regulations. The statement shall also include a proposed Nonbinding Preliminary Allocation of Responsibility for all identified responsible parties; and,

(h) A schedule for implementation of all proposed removal and remedial actions.

In conjunction with DTSC, Respondent(s) shall implement the public review process specified in DTSC's Public Participation Policy and Guidance Manual. Within ten (10) days of closure of the public comment period, Respondents shall submit a written Responsiveness Summary of all written and oral comments presented and received during the public comment period.

Following DTSC's finalization of the Responsiveness Summary, DTSC will specify any changes to be made in the RAP. Respondent(s) shall modify the document in accordance with DTSC's specifications and submit a final RAP within fifteen (15) days of receipt of DTSC's comments.

5.12 Remedial Design (RD). Within sixty (60) days after DTSC approval of the final RAP, Respondent(s) shall submit to DTSC for review and approval a RD describing in detail the technical and operational plans for implementation of the final RAP which includes the following elements, as applicable:

(a) Design criteria, process unit and pipe sizing calculations, process diagrams, and final plans and specifications for facilities to be constructed;

(b) Description of equipment used to excavate, handle, and transport contaminated material;

(c) A field sampling and laboratory analysis plan addressing sampling during implementation and to confirm achievement of the performance objectives of the RAP;

(d) A transportation plan identifying routes of travel and final destination of wastes generated and disposed, and including approvals from California Department of Transportation, California Highway Patrol and any other local, state, or federal agency;

(e) For groundwater extraction systems: aquifer test results capture zone calculations, specifications for extraction and performance monitoring wells, and a plan to demonstrate that capture is achieved;

(f) An updated health and safety plan addressing the implementation activities;

(g) Identification of any necessary permits and agreements;

(h) An operation and maintenance plan including any required monitoring; and,

(i) A detailed schedule for implementation of the remedial action consistent with the schedule contained in the approved RAP including procurement, mobilization, construction phasing, sampling, facility startup, and testing.

5.13 Land Use Covenant. If the approved remedy in the final RAP or final RAW includes environmental or land use restrictions, pursuant to California Code of Regulations, title 22, section 67391.1, the current owner(s) of the Site shall sign and record the environmental restrictions approved by DTSC within [90] days of DTSC's approval of the final RAP or RAW. If Respondents do not own the property that will be subject to the environmental restrictions or other institutional controls then Respondent(s) shall negotiate with the current property owner(s) during the RI/FS and draft RAP or RAW stages to insure environmental restrictions or other institutional controls contained in the selected remedy will be implemented.

5.14 Implementation of Final RAP or final RAW. Upon DTSC approval of the RD or final RAW, Respondent(s) shall implement the final RAP or final RAW in accordance with the approved schedule in the RD or final RAW. Within thirty (30) days of completion of field activities, Respondent(s) shall submit an Implementation Report documenting the implementation of the Final RAP and RD or final RAW.

5.15 Operation and Maintenance (O&M). Respondent(s) shall comply with all O&M requirements in accordance with the final RAP and approved RD or final RAW. Within thirty (30) days of the date of DTSC's request, Respondent(s) shall prepare and submit to DTSC for approval an O&M plan that includes an implementation schedule. Respondent(s) shall implement the plan in accordance with the approved schedule. O&M Agreements, which include financial assurance, must be fully executed with DTSC prior to certification of the Site.

5.16 Five-Year Review. Respondent(s) shall review and reevaluate the remedial action after a period of one (1) year from the date of certification, and every other year thereafter until the fifth year, then every five (5) years thereafter. The review will start after the completion of construction and startup. The review and reevaluation shall be conducted to determine if human health and the environment are being protected by the remedial action. Within thirty (30) calendar days before the end of the time period approved by DTSC to review and reevaluate the remedial action, Respondent(s) shall submit a remedial action review workplan to DTSC for review and approval. Within sixty (60) days of DTSC's approval of the workplan, Respondent(s) shall implement the workplan and shall submit a comprehensive report of the results of the remedial action review. The report shall describe the results of all sample analyses, tests and other data generated or received by Respondent(s) and evaluate the adequacy of the implemented remedy in protecting public health, safety and the environment. As a result of any review performed under this Section, Respondent(s) may be required to perform additional work or to modify work previously performed.

5.17 Changes During Implementation of the Final RAP or Final RAW. During the implementation of the final RAP and RD, DTSC may specify such additions, modifications, and revisions to the RD or final RAW as DTSC deems necessary to protect public health and safety or the environment or to implement the final RAP or final RAW.

5.18 Stop Work Order. In the event that DTSC determines that any activity (whether or not pursued in compliance with this Order) may pose an imminent or substantial endangerment to the health or safety of people on the Site or in the surrounding area or to the environment, DTSC may order Respondent(s) to stop further implementation of this Order for such period of time needed to abate the endangerment. In the event that DTSC determines that any Site activities (whether or not pursued in compliance with this Order) are proceeding without DTSC authorization, DTSC may order Respondent(s) to stop further implementation of this Order or activity for such period of time needed to obtain DTSC authorization, if such authorization is appropriate. Any deadline in this Order directly affected by a Stop Work Order, under this Section, shall be extended for the term of the Stop Work Order.

5.19 Emergency Response Action/Notification. In the event of any action or occurrence (such as a fire, earthquake, explosion, or human exposure to hazardous substances caused by the release or threatened release of a hazardous substance) during the course of this Order, Respondent(s) shall immediately take all appropriate action to prevent, abate, or minimize such emergency, release, or immediate threat of release and shall immediately notify the Project Manager. Respondent(s) shall take such action in consultation with the Project Manager and in accordance with all applicable provisions of this Order. Within seven days of the onset of such an event, Respondent(s) shall furnish a report to DTSC, signed by Respondent(s)' Project Coordinator, setting forth the events which occurred and the measures taken in the response thereto. In the event that Respondent(s) fail to take appropriate response and DTSC takes the action instead, Respondent(s) shall be liable to DTSC for all costs of

the response action. Nothing in this section shall be deemed to limit any other notification requirement to which Respondent(s) may be subject.

5.20 Discontinuation of Remedial Technology. Any remedial technology employed in implementation of the final RAP or final RAW shall be left in place and operated by Respondent(s) until and except to the extent that DTSC authorizes Respondent(s) in writing to discontinue, move or modify some or all of the remedial technology because Respondent(s) has met the criteria specified in the final RAP or final RAW for its discontinuance, or because the modifications would better achieve the goals of the final RAP or final RAW.

5.21 Financial Assurance. Unless exempt by statute, Respondent(s) shall demonstrate to DTSC and maintain financial assurance for operation and maintenance and monitoring. Respondent(s) shall demonstrate financial assurance prior to the time that operation and maintenance activities are initiated and shall maintain it throughout the period of time necessary to complete all required operation and maintenance activities. The financial assurance mechanisms shall meet the requirements of Health and Safety Code section 25355.2. All financial assurance mechanisms are subject to the review and approval of DTSC.

VI. GENERAL PROVISIONS

6.1 Project Coordinator. No later than 15 days from the effective date of this Order, Respondent(s) shall submit to DTSC in writing the name, address, and telephone number of a Project Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from DTSC. Respondent(s) shall promptly notify DTSC of any change in the identity of the Project Coordinator.

6.1.1 Communication and Coordination Plan (CCP). Within thirty (30) days from the date DTSC issues Orders to any other responsible parties, Respondents shall submit to DTSC for its approval a CCP which specifies the requirements and procedures by which all Respondents will communicate and coordinate with one another in carrying out the requirements of this Order. At a minimum the CCP shall contain the following:

(a) Communication Strategy. The Respondents shall specify how the single Project Coordinator and all Respondents will communicate and disseminate information relative to the Order. The name, title, address, e-mail address, and telephone number of the primary contact person for each of the Respondents shall be included in the communication strategy; and,

(b) Coordination of Efforts. The Respondents shall describe with specificity how the technical, financial, and administrative requirements of the Order are to be coordinated and distributed among and performed by the Respondents. The CCP shall describe the obligations of each and every Respondent in full.

A duly authorized representative of the Respondents shall sign the CCP prior to the submission of the CCP to the Department. Failure of a Respondent to sign the CCP will constitute a violation of the Order by that Respondent.

The Respondents shall submit all proposed changes or amendments to the CCP to Department for approval.

The CCP, as approved by the Department, shall be incorporated into and enforceable under the Order.

6.2 Project Engineer/Geologist. The work performed pursuant to this Order shall be under the direction and supervision of a qualified professional engineer or a registered geologist in the State of California, with expertise in hazardous substance Site cleanup. No later than 30 days from the effective date of this Order, Respondent(s) must submit: a) The name and address of the project engineer or geologist chosen by the Respondent(s); and b) in order to demonstrate expertise in hazardous substance cleanup, the resume of the engineer or geologist, and the statement of qualifications of the consulting firm responsible for the work. Respondent(s) shall promptly notify DTSC of any change in the identity of the Project Engineer/Geologist. Respondent(s) shall obtain approval from DTSC before the new Project Engineer/Geologist performs any work under this Order.

6.3 Monthly Summary Reports. Within 45 days from the date the Order is signed by DTSC, and on a monthly basis thereafter, Respondent(s) shall submit a Monthly Summary Report of its activities under the provisions of this Order. The report shall be received by DTSC by the 15th day of each month and shall describe:

(a) Specific actions taken by or on behalf of Respondent(s) during the previous calendar month;
(b) Actions expected to be undertaken during the current calendar month;
(c) All planned activities for the next month;
(d) Any requirements under this Order that were not completed;
(e) Any problems or anticipated problems in complying with this Order; and,
(f) All results of sample analyses, tests, and other data generated under this Order during the previous calendar month, and any significant findings from these data.

6.4 Quality Assurance/Quality Control (QA/QC). All sampling and analysis conducted by Respondent(s) under this Order shall be performed in accordance with QA/QC procedures submitted by Respondent(s) and approved by DTSC pursuant to this Order.

6.5 Submittals of this Order. All submittals and notifications from Respondent(s) required by this Order shall be sent simultaneously to:

Charlie Ridenour, P.E.
Branch Chief
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826
Attention: Martin Herrmann
Project Manager

Bruce H. Wolfe
Executive Officer
San Francisco Bay
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612
Attention: Kent Ave

Cliff Covey, Director
Solano County Environmental Health
601 Texas Street
Fairfield, California 94533

6.6 Communications. All approvals and decisions of DTSC made regarding submittals and notifications will be communicated to Respondent(s) in writing by the Branch Chief, Brownfields and Environmental Restoration Program, Department of Toxic Substances Control, or his/her designee. No informal advice, guidance, suggestions or comments by DTSC regarding reports, plans, specifications, schedules or any other writings by Respondent(s) shall be construed to relieve Respondent(s) of the obligation to obtain such formal approvals as may be required.

6.7 DTSC Review and Approval.

(a) All response actions taken pursuant to this Order shall be subject to the approval of DTSC. Respondent(s) shall submit all deliverables required by this Order to DTSC. Once the deliverables are approved by DTSC, they shall be deemed incorporated into, and where applicable, enforceable under this Order.

(b) If DTSC determines that any report, plan, schedule or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health or safety or the environment, DTSC may:

(1) Modify the document as deemed necessary and approve the document as modified; or,

(2) Return comments to Respondent(s) with recommended changes and a date by which Respondent(s) must submit to DTSC a revised document incorporating the recommended changes.

(c) Any modifications, comments or other directives issued pursuant to (a) above, are incorporated into this Order. Any noncompliance with these modifications or directives shall be deemed a failure or refusal to comply with this Order.

6.8 Compliance with Applicable Laws. Nothing in this Order shall relieve Respondent(s) from complying with all other applicable laws and regulations, including but not limited to compliance with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California Regional Water Quality Control Board. Respondent(s) shall conform all actions required by this Order with all applicable federal, state, and local laws and regulations.

6.9 Respondent Liabilities. Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current or future operations of Respondent(s). Nothing in this Order is intended or shall be construed to limit the rights of any of the parties with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Order is intended or shall be construed to limit or preclude DTSC from taking any action authorized by law to protect public health or safety or the environment and recovering the cost thereof. Notwithstanding compliance with the terms of this Order, Respondent(s) may be required to take further actions as are necessary to protect public health and the environment.

6.10 Site Access. Access to the Site and laboratories used for analyses of samples under this Order shall be provided at all reasonable times to employees, contractors, and consultants of DTSC. Nothing in this Section is intended or shall be construed to limit in any way the right of entry or inspection that DTSC or any other agency may otherwise have by operation of any law. DTSC and its authorized representatives shall have the authority to enter and move freely about all property at the Site at all reasonable times for purposes including, but not limited to: inspecting records, operating logs, sampling and analytic data, and contracts relating to this Site; reviewing the progress of Respondent(s) in carrying out the terms of this Order; conducting such tests as DTSC may deem necessary; and verifying the data submitted to DTSC by Respondent(s).

To the extent the Site or any other property to which access is required for the implementation of this Order is owned or controlled by persons other than Respondent(s), Respondent(s) shall use best efforts to secure from such persons access for Respondent(s), as well as DTSC, its representatives, and contractors, as necessary to effectuate this Order. To the extent that any portion of the Site is controlled by tenants of Respondent(s), Respondent(s) shall use best efforts to secure from such

tenants, access for Respondent(s), as well as for DTSC, its representatives, and contractors, as necessary to effectuate this Order.

For purposes of this Section, "best efforts" includes the payment of reasonable sums of money in consideration of access. If any access required to complete the Work is not obtained within forty-five (45) days of the effective date of this Order, or within forty-five (45) days of the date DTSC notifies Respondent(s) in writing that additional access beyond that previously secured is necessary, Respondent(s) shall promptly notify DTSC, and shall include in that notification a summary of the steps Respondent(s) has taken to attempt to obtain access. DTSC may, as it deems appropriate, assist Respondent(s) in obtaining access. Respondent(s) shall reimburse DTSC in obtaining access, including, but not limited to, attorneys' fees and the amount of just compensation.

6.11 Site Access for Respondents. The Site owner Respondent(s) shall grant access to other Respondent(s) who are in compliance with this Order for the purpose of conducting activities pursuant to this Order or for activities deemed necessary by DTSC to meet the objectives of this Order.

6.12 Sampling, Data and Document Availability. Respondent(s) shall permit DTSC and its authorized representatives to inspect and copy all sampling, testing, monitoring or other data generated by Respondent(s) or on Respondent(s) behalf in any way pertaining to work undertaken pursuant to this Order. Respondent(s) shall submit all such data upon the request of DTSC. Copies shall be provided within seven (7) days of receipt of DTSC's written request. Respondent(s) shall inform DTSC at least seven (7) days in advance of all field sampling under this Order, and shall allow DTSC and its authorized representatives to take duplicates of any samples collected by Respondent(s) pursuant to this Order. Respondent(s) shall maintain a central depository of the data, reports, and other documents prepared pursuant to this Order.

6.13 Record Retention. All such data, reports and other documents shall be preserved by Respondent(s) for a minimum of ten (10) years after the conclusion of all activities under this Order. If DTSC requests that some or all of these documents be preserved for a longer period of time, Respondent(s) shall either comply with that request or deliver the documents to DTSC, or permit DTSC to copy the documents prior to destruction. Respondent(s) shall notify DTSC in writing at least six (6) months prior to destroying any documents prepared pursuant to this Order.

6.14 Government Liabilities.The State of California shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by Respondent(s), or related parties specified in Section 6.26, Parties Bound, in carrying out activities pursuant to this Order, nor shall the State of California be held as party to any contract entered into by Respondent(s) or their agents in carrying out activities pursuant to this Order.

6.15 Additional Actions. By issuance of this Order, DTSC does not waive the right to take any further actions authorized by law.

6.16 Extension Requests. If Respondent(s) is unable to perform any activity or submit any document within the time required under this Order, Respondent(s) may, prior to expiration of the time, request an extension of the time in writing. The extension request shall include a justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

6.17 Extension Approvals. If DTSC determines that good cause exists for an extension, it will grant the request and specify a new schedule in writing. Respondent(s) shall comply with the new schedule incorporated in this Order.

6.18 Liability for Costs. Respondents are liable for all of DTSC's costs that have been incurred in taking response actions at the Site (including costs of overseeing response actions performed by Respondent(s) and costs to be incurred in the future.

6.19 Payment of Costs. DTSC may bill Respondent(s) for costs incurred in taking response actions at the Site prior to the effective date of this Order. DTSC will bill Respondent(s) quarterly for its response costs incurred after the effective date of this Order. Respondent(s) shall pay DTSC within sixty (60) days of receipt of any DTSC billing. Any billing not paid within sixty (60) days is subject to interest calculated from the date of the billing pursuant to Health and Safety Code section 25360.1. All payments made by Respondent(s) pursuant to this Order shall be by cashier's or certified check made payable to this "DTSC," and shall bear on the face the project code of the Site (Site 201993-BIA) and the Docket number of this Order. Payments shall be sent to:

Department of Toxic Substances Control
Accounting/Cashier
1001 I Street, 21st Floor, MS-21A
P.O. Box 806
Sacramento, California 95812-0806

A photocopy of all payment checks shall also be sent to the person designated by DTSC to receive submittal(s) under this Order.

6.20 Severability. The requirements of this Order are severable, and Respondent(s) shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

6.21 Incorporation of Plans, Schedules and Reports. All plans, schedules, reports, specifications and other documents that are submitted by Respondent(s) pursuant to this Order are incorporated in this Order upon DTSC's approval or as modified pursuant to Section 6.7, DTSC Review and Approval, and shall be implemented by Respondent(s). Any noncompliance with the documents incorporated in this Order shall be deemed a failure or refusal to comply with this Order.

6.22 Modifications. DTSC reserves the right to unilaterally modify this Order. Any modification to this Order shall be effective upon the date the modification is signed by DTSC and shall be deemed incorporated in this Order.

6.23 Time Periods. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days.

6.24 Termination and Satisfaction. Except for Respondent(s) obligations under Sections 5.15, Operation and Maintenance (O&M), 5.16 Five-Year Review, 5.21 Financial Assurance, 6.13 Record Retention, 6.18 Liability for Costs, and 6.19 Payment of Costs, Respondent(s) obligations under this Order shall terminate and be deemed satisfied upon Respondent(s) receipt of written notice from DTSC that Respondent(s) has complied with all the terms of this Order.

6.25 Calendar of Tasks and Schedules. This Section is merely for the convenience of listing in one location the submittals required by this Order. If there is a conflict between the date for a scheduled submittal within this Section and the date within the Section describing the specific requirement, the latter shall govern.

Calendar of Tasks and Schedules

TASK	SCHEDULE
1. Identify Project Coordinator - Section 6.1	No later than 15 days from the effective date of this Order
2. Submit Notice of Intent to Comply - Section 7	No later than 15 days from the effective date of this Order
3. Identify Project Engineer/Geologist - Section 6.2	No later than 30 days from the effective date of this Order
4. Submit Communication and Coordination Plan - Section 6.1.1	Within thirty (30) days from the effective date of this Order
5. Attend Site Remediation Strategy Meeting - Section 5.1.4	No later than 35 days from the effective date of this Order
6. Submit Monthly Summary Reports - Section 6.3	Within forty-five (45) days from the effective date of this order and no later than the fifteenth of every month thereafter
7. Submit Public Participation Plan - Section 5.8	Within forty (40) days of the Site Remediation Strategy Meeting
8. Submit RI/FS Workplan - Section 5.2.2	Within sixty (60) days of the Site Remediation Strategy Meeting
9. Submit interim screening and evaluation document - Section 5.3	As requested by DTSC

10. Submit Treatability Studies - Section 5.4	As required during Site characterization or as requested by DTSC
11. Submit RI Report - Section 5.5	Per approved RI/FS Workplan Schedule
12. Submit Baseline Risk Assessment - Section 5.6	Within thirty (30) days, or as required, from approval of RI Report
13. Submit FS Report - Section 5.7	Within forty-five (45) days from submittal of RI Report
14. Submit Draft RAP - Section 5.11	Within thirty (30) days after approval of FS Report
15. Submit Final RAP - Section 5.11	Within fifteen (15) days of receipt of DTSC's comments
16. Submit Remedial Design - Section 5.12	Within sixty (60) days after DTSC's approval of the Final RAP
17. Land Use Covenant - Section 5.13	Within ninety (90) days of approval of final RAP or final RAW
18. Submit Draft Remedial Action Workplan - Section 5.10	Within thirty (30) days after DTSC approval of the FS.
19. Implement the final RAP or final RAW - Section 5.14	Upon approval of the RD or final RAW.
20. Provide prior notice before conducting field sampling - Section 6.12	Inform DTSC seven (7) days in advance of sampling
21. Provide Copies of Sampling, Data, and Documentation - Section 6.12	Within seven (7) days of receipt of DTSC's request
22. Submit Emergency Response Action Report - Section 5.19	Within seven (7) days of an emergency response action
23. Submit and Distribute Fact Sheets - Section 5.8	For projected or completed key milestones, as specified in Public Participation Plan or when requested by DTSC
24. Submit California Environmental Quality Act information - Section 5.9	Within thirty (30) days after requested by DTSC
25. Submit information needed to prepare the Responsiveness Summary - Section 5.10	Within fourteen (14) days of DTSC's request following closure of the public comment period
26. Submit final RAW - Section 5.10	Within fifteen (15) days of receipt of DTSC's comments based on the Responsiveness Summary

27. Owners to Sign a Land Use Covenant - Section 5.13	Within ninety (90) days of DTSC's approval of final RAP or final RAW if institutional controls required.
28. Submit Implementation Report - Section 5.14	Within thirty (30) days of completion of field activities
29. Submit O&M Workplan - Section 5.15	Within thirty (30) days of DTSC's request following approval of final RAP or final RAW

6.26 Parties Bound. This Order applies to and is binding upon Respondent(s), and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to, individuals, partners, and subsidiary and parent corporations. Respondent(s) shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants that are retained to conduct any work performed under this Order at the time of retaining their services.

Respondent(s) shall condition any such contracts upon satisfactory compliance with his Order. Notwithstanding the terms of any contract, Respondent(s) are responsible for compliance with this Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Order.

6.27 Change in Ownership. No change in ownership or corporate or partnership status relating to the Site shall in any way alter Respondent's responsibility under this Order. No conveyance of title, easement, or other interest in the Site, or a portion of the Site, shall affect Respondent's obligations under this Order. Unless DTSC agrees that such obligations may be transferred to a third party, Respondent(s) shall be responsible for and liable for any failure to carry out all activities required of Respondent(s) by the terms and conditions of this Order, regardless of Respondent's use of employees, agents, contractors, or consultants to perform any such tasks. Respondent(s) shall provide a copy of this Order to any subsequent owners or successors before ownership rights or stock or assets in a corporate acquisition are transferred.

VII. NOTICE OF INTENT TO COMPLY

7. Not later than fifteen (15) days after the effective date of this Order, Respondent(s) shall provide written notice, in accordance with paragraph 6.5 Submittals of this Order, stating whether or not Respondent(s) will comply with the terms of this Order. If Respondent(s), or any one of them, do not unequivocally commit to perform all of the requirements of this Order, they, or each so refusing, shall be deemed to have violated this Order and to have failed or refused to comply with this Order. Respondent's(s') written notice shall describe, using facts that exist on or prior to the effective date of this Order, any "sufficient cause" defenses asserted by Respondent(s) under Health and Safety Code sections 25358.3(a) and 25355.5(a)(1)(B) or CERCLA section 107(c)(3), 42 U.S.C. section 9607(c)(3).

VIII. EFFECTIVE DATE

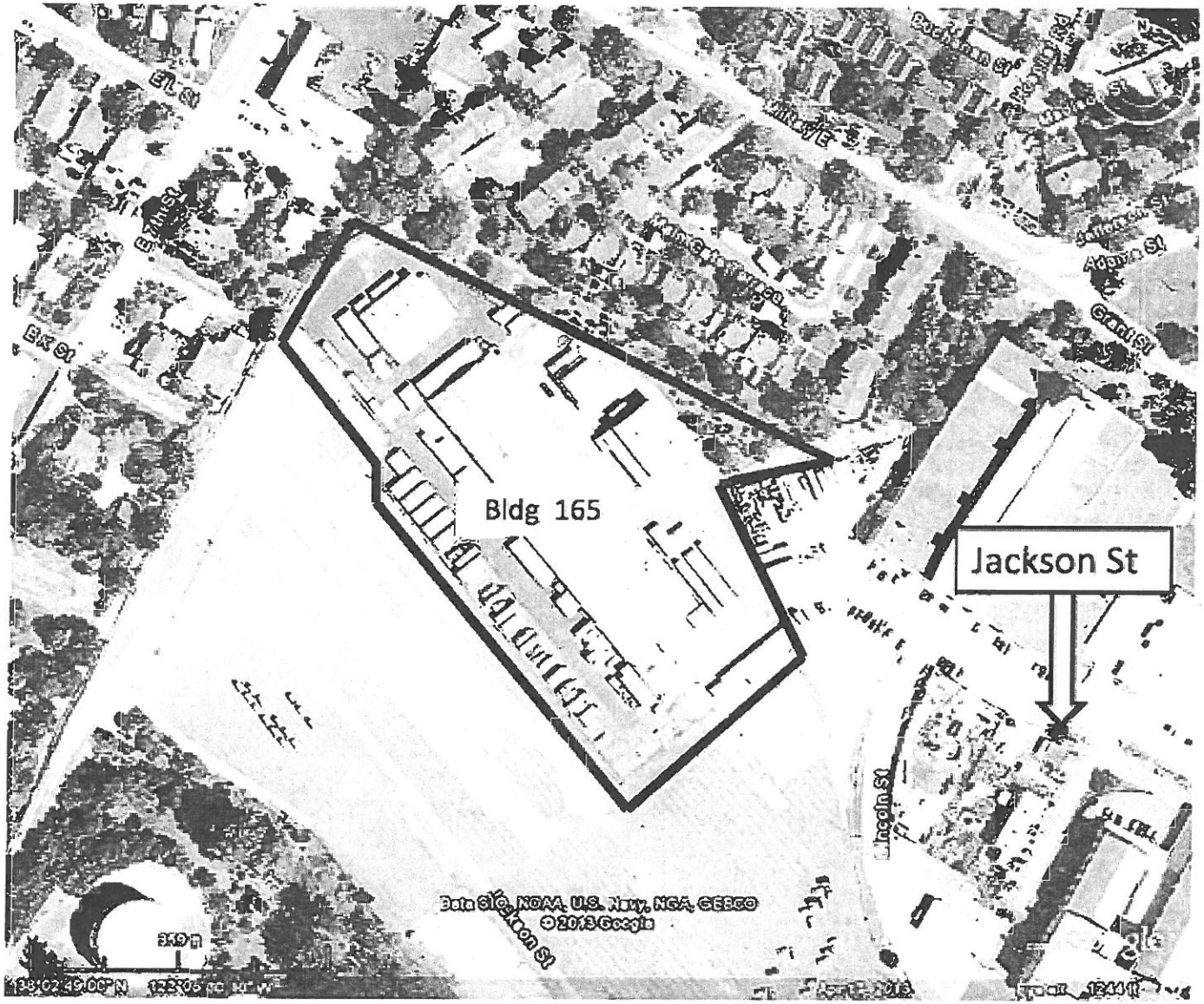
8. This Order is final and effective five days from the date of mailing, which is the date of the cover letter transmitting the Order to you.

IX. PENALTIES FOR NONCOMPLIANCE

9. Each Respondent may be liable for penalties of up to $25,000 for each day out of compliance with any term or condition set forth in this Order and for punitive damages up to three (3) times the amount of any costs incurred by DTSC as a result of Respondent's(s') failure to comply, pursuant to Health and Safety Code sections 25359, 25359.2, 25359.4, and 25367(c). Health and Safety Code section 25359.4.5 provides that a responsible party who complies with this Order, or with another order or agreement concerning the same response actions required by this Order, may seek treble damages from Respondent(s) who fail or refuse to comply with this Order or with another order or agreement concerning the same response actions required by this Order without sufficient cause.

DATE OF ISSUANCE: 6/24/2014

Charlie Ridenour
Branch Chief
Cleanup Program – Sacramento Office
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control



Department of Toxic Substances Control

EXHIBIT A

BENICIA INTER-NATIONAL ASSOCIATES

Solano Co. Assessor's Parcel No. 0080-140-440

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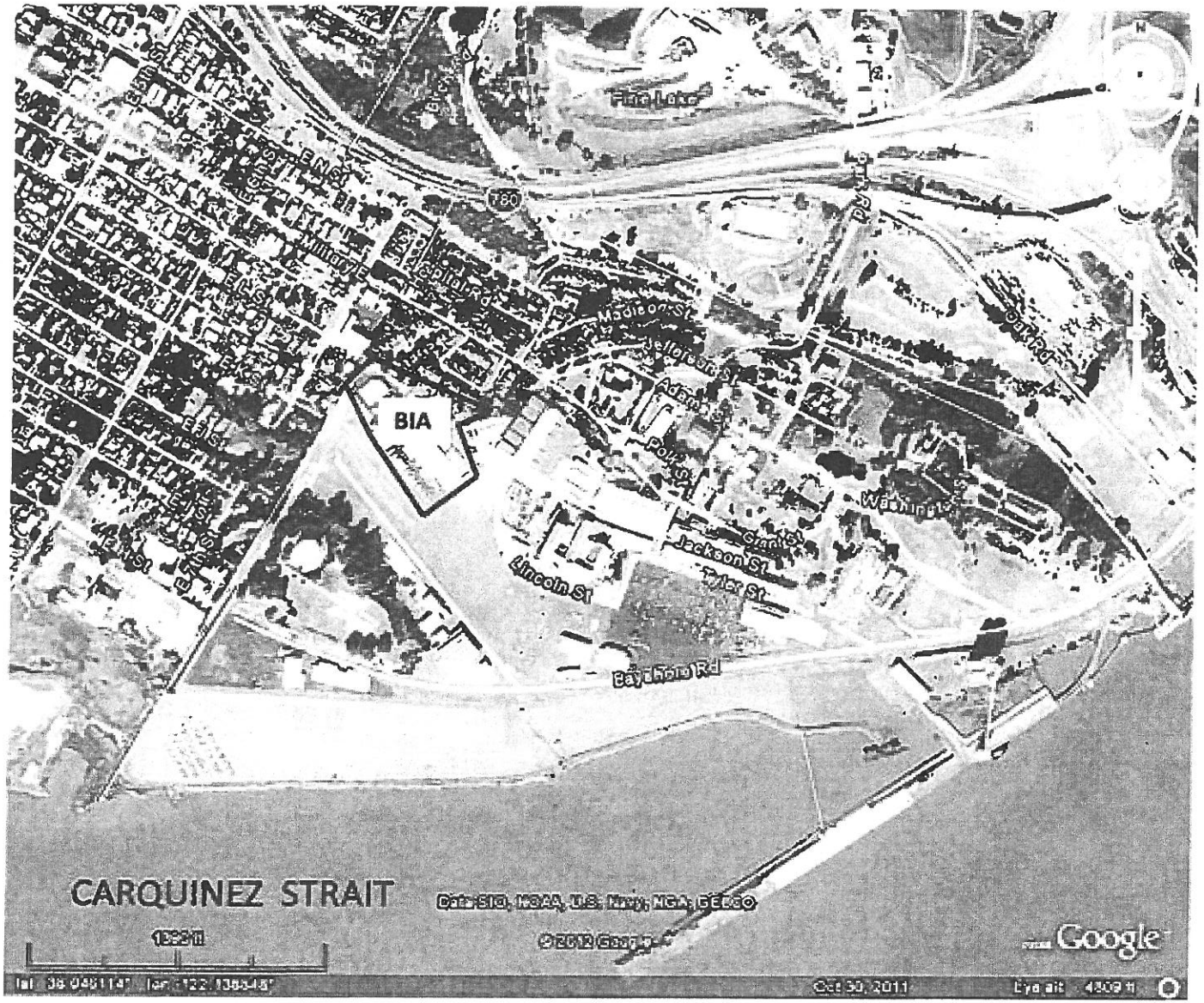
 SITE MAP



Department of Toxic Substances Control

EXHIBIT A

BENICIA INTER-NATIONAL ASSOCIATES

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 VICINITY MAP