



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

MEMORANDUM

Date: September 27, 2005

SUBJECT: Request for a Removal Action
Omega Chemical Superfund Site
Whittier, Los Angeles County, California

FROM: Chris Lichens, Remedial Project Manager
Site Cleanup Section 4 (SFD-7-4)

THRU: Fred Schauffler, Chief
Site Cleanup Section 4 (SFD-7-4)

TO: Elizabeth J. Adams, Chief
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I. PURPOSE

This Action Memorandum requests and documents approval of the herein proposed removal action at the former Omega Chemical facility located at 12512 and 12520 Whittier Boulevard, Whittier, California. This action is a non-time-critical removal action pursuant to Section 104 (a) (1) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. §9601 *et seq.*, and Section 300.415 of the National Contingency Plan (NCP), 40 CFR § 300.415. The purpose of this removal action is to mitigate threats to human health and the environment posed by the presence of uncontrolled hazardous substances, specifically volatile organic compound (VOC) contamination in groundwater on and near the former Omega property.

II. SITE CONDITIONS AND BACKGROUND

Site Status: NPL
Category of Removal: Non-time-critical
CERCLIS ID: CAD042245001
Site ID: BC

A. Site Description

1. Removal Site Evaluation

The Omega Chemical Corporation ("Omega") was a refrigerant/solvent recycling operation located in Whittier, California, a community of approximately 85,000 people. The former Omega facility is located across the street from a residential neighborhood and within one mile of several schools, including three elementary schools and two high schools. The facility operated as a Resource Conservation and Recovery Act (RCRA) solvent and refrigerant recycling and treatment facility from approximately 1976 to 1991, handling primarily chlorinated hydrocarbons and chlorofluorocarbons. Drums and bulk loads of waste solvents and chemicals from various industrial activities were processed at Omega to form commercial products. Chemical, thermal, and physical treatment processes were reportedly used to recycle the waste materials. Wastes generated from these treatment and recycling activities included distillation column (still) bottoms, aqueous fractions, and non-recoverable solvents.

Between 1984 and 1988, the Omega Chemical Corporation received many notices of violation from the Los Angeles County Department of Health. In the early 1990's, the California Department of Toxic Substances Control (DTSC) and EPA actively pursued the owner/operator of the Omega Chemical Corporation to remove drums of contaminants and clean up the site.

On August 27, 1993, at the request of DTSC, EPA conducted an assessment of the Omega facility to evaluate the condition of over 2,900 drums of unprocessed hazardous waste, which took up most of the available storage space on the property. The drums were situated on pallets, in some cases three high, and many were weathered from years of outside storage. EPA's conclusion from the 1993 assessment was that the Omega facility represented a significant waste management problem, but should remain a State-lead site.

In January 1995, DTSC again requested EPA assistance in re-evaluating the condition of the facility. A preliminary assessment was conducted on January 19, 1995 and the following conditions were observed at the facility:

- Over 3,000 drums were observed stacked three high, some without pallets between them;
- a large majority of the drums appeared to be extremely corroded;
- numerous drums were observed leaking onto other drums and onto a concrete pad; and
- numerous spills were observed leading away from the drums to other parts of the property.

The preliminary assessment concluded that the materials at the site, as well as the number of containers and their deteriorated condition, posed a potential threat to public health, welfare or the environment.

On May 9, 1995, EPA issued a Unilateral Administrative Order (UAO) to the owner of the Omega Chemical Corporation and to the generators of the hazardous substances that had shipped

more than ten tons of hazardous substances to the site. During 1995 and 1996, the potentially responsible party (PRP) group known as the Omega Chemical Site PRP Organized Group (“OPOG”), with EPA oversight, performed the removal of approximately 2,700 drums at the site, and collected subsurface and groundwater samples.

Chlorinated hydrocarbons, including tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), and Freons were identified as the primary contaminants of concern in soil and groundwater directly beneath the property. Other contaminants are also present. High concentrations of chemicals of concern have also been detected in groundwater west and southwest of the former Omega facility.

EPA has divided the Omega Chemical Superfund Site into two Operable Units (OUs): OU-1 and OU-2. OU-1 includes the former Omega facility property and extends approximately 100 feet southwest of Putnam Street. OU-2 includes contamination in groundwater, downgradient of OU-1, that originated from the former Omega facility and potentially also from other sources.

2. Physical Location

The former Omega property is located at 12504/12512 East Whittier Boulevard in Whittier, California (see Figure 1). It occupies Los Angeles County Assessor Tract Number 13486, Lots 3 and 4. The former Omega property is approximately 41,000 square feet in area and contains two structures, a warehouse and an administrative building. A loading dock is attached to the rear of the warehouse. The exterior areas are concrete-paved and the former Omega property is secured with a perimeter fence and locking gate.

3. Site Characteristics

Current and Former Use

Sierra Bullets, Inc. and various related entities, that manufactured bullets, owned the 12504 property from 1951 to 1963. Before construction of the buildings in 1955, this property was used for agriculture.

Fred R. Rippy, Inc. purchased the parcel at 12504 Whittier Blvd. in 1963 and sold it to Omega Chemical Corporation in 1987. From 1963 to 1966, Rippy operated a machine shop and then leased the facility to the following tenants, in chronological order:

- Accessory Products Company (dry good warehousing) (1966-1967)
- Maples Bros. Inc. (wood furniture manufacturer) (1967-1970)
- Stoner Western Company (ambulance manufacturer) (1970-1974)
- Bachelor Chemical Company (chemical recycler) (1974-1976)
- Omega Chemical Corporation (1976-1987)

From 1976 to 1987 Omega Chemical Corporation leased 12504 Whittier Blvd. for operation of a recycling and treatment facility for commercial and industrial solid and liquid wastes and a transfer station for storage and consolidation of wastes for shipment to other treatment and/or disposal facilities. In 1987, Omega Chemical Corporation purchased the property it was leasing at 12504 Whittier Blvd. and also purchased the adjacent property at 12512 Whittier Blvd. so as to expand operations onto the 12512 Whittier Blvd. property. The Omega Chemical Corporation ceased operating in 1991, but its president, Dennis O'Meara, continued to operate under a different company name until 1995 on a more limited basis. O'Meara owned both parcels until they were foreclosed upon in 2003. Between 1991 and 2003, the properties were occupied by various tenants.

The parcel at 12512 Whittier Blvd. was purchased by Fred R. Rippey, Inc. in 1984 and sold it to Omega Chemical in 1987. During that period tenants were Earthly Endeavors, who made handcrafted clay products, and the ANB Construction Company. The property was first sold for development in 1951. Between 1951 and 1984, the property was purchased and sold several times. It is not known how the property was utilized during this period. Prior to 1951, the property was used for agriculture.

Van Owen Holdings LLC ("Van Owen") of Los Angeles, California purchased the former Omega property (12504 and 12512 Whittier Blvd.) in 2003. Currently, Van Owen has two tenants occupy the property. Star City Auto Body occupies the warehouse (12504 Whittier Blvd.) and performs auto body repair and painting. Star City also leases the small paved parking lot north of the warehouse building for automobile parking. Three Kings Construction occupies the former administrative building (12512 Whittier Blvd) and larger paved parking area south of the warehouse. The building is used for office space, and the parking lot is used for temporary storage and parking for construction vehicles and equipment.

Local Geology and Hydrogeology

Lithologic data obtained from borings and wells installed at the Omega property and along Putnam Street indicate that the uppermost aquifer in the area southwest of the former Omega property is comprised of sand, silty sand and well graded gravel containing significant silt. These fluvial deposits pinch out from Putnam Street toward the former Omega property. A 26-foot thick clay unit separates the shallow aquifer zone from a deeper sand unit that also appears to pinch out between Putnam Street and the former Omega property.

Soils encountered beneath the former Omega property consist primarily of clay and silt. The depth to groundwater in the shallow zone is about 70 feet below ground surface (bgs). Groundwater in the deeper sand unit is about nine feet deeper than in the shallow zone, indicating hydraulic separation between the two aquifer zones. Groundwater in the shallow zone flows from the former Omega property to the southwest. Regional hydrogeologic information is inconclusive on the presence or absence of major regional named aquifers in this portion of the Whittier area.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Groundwater sampling results indicate the highest contaminant concentrations are associated with the former Omega property and primarily limited to the shallower portions of the aquifer. The main contaminants dissolved in groundwater at OU-1 include chlorinated hydrocarbons (primarily PCE, TCE, and 1,1-DCE), freons, and 1,4-dioxane. These contaminants are hazardous substances as defined in CERCLA § 101(14). The highest VOC concentrations are found in well OW-1A, screened from 62.5 to 77.5 feet bgs; PCE concentrations in this well have been as high as 210,000 ug/L. The aqueous solubility of PCE is 200,000 ug/L, which indicates that dense non-aqueous phase liquid (DNAPL) is likely to be present in this area.

Based on the results of drilling, aquifer testing, and groundwater sampling, there is a relatively high-permeability channel deposit immediately downgradient of the former Omega property in the vicinity of well OW-8 on Putnam Street. Contaminant migration from OU-1 occurs primarily through this narrow high-permeability channel into OU-2.

5. NPL Status

The Omega Site was added to the NPL in 1999.

6. Maps, pictures and other graphic representations

Attachments are listed on the final page of this Action Memorandum. Figure 1 is a general map of the Whittier area, showing the location of the Omega property. Figure 2 shows the Omega property in more detail and the boundary of Operable Unit 1. Figure 3 shows the estimated lateral extent of the downgradient PCE groundwater plume, based on 2003 data; Operable Unit 2 is defined as the downgradient groundwater plume.

B. Other Actions to Date

1. Previous actions

There have been numerous enforcement actions taken at the Omega Chemical Site by various regulatory agencies. A summary of these actions are as follows:

1984 - 1991: The Omega Chemical Corporation received numerous Notices of Violations (NOVs) from the Los Angeles County Department of Health. These violations were issued for the improper labelling of drums, leaking drums, incomplete hazardous waste manifests and numerous safety violations. **November, 1990:** A preliminary injunction was filed by the Los Angeles County Superior Court enjoining Omega from accepting any offsite hazardous waste.

February, 1991: The San Bernardino and Los Angeles County District Attorney's offices issued warrants to search three railcars on the Omega property. The search indicated illegal storage and transport of 700 hazardous waste drums and falsified manifests and drum labels.

April, 1991: The Los Angeles County Superior Court ordered the Omega Chemical Corporation to cease operations, remove all hazardous wastes, and close the facility.

October, 1991: US EPA entered into an Administrative Order on Consent, requiring the Omega Chemical Corporation to perform several interim measures to mitigate current or potential threats to human health or the environment (e.g. improve Site security, repack leaking drums and immediately remove them to an appropriate Class I facility) and to submit a RCRA facility investigation (RFI).

August, 1993: The California Department of Toxic Substances Control (DTSC) requested assistance from US EPA to conduct a site assessment of the Omega Site. US EPA tasked the Technical Assistance Team ("TAT") contractor to conduct a site assessment, at which time TAT observed approximately 2,900 drums of hazardous wastes that entirely filled all available storage space at the Site. The drums were situated on pallets, sometimes three high and stacked in rows across the Site. Many of the drums were weathered from years of outside storage; however, only a few of the drums inspected displayed any signs of gross deterioration or were leaking. The conclusion reached from this 1993 TAT assessment was that Omega represented a significant waste management problem, although the Site should remain State lead.

January, 1995: The Los Angeles County Superior Court found Dennis O'Meara, president of the Omega Chemical Corporation, in contempt of its orders and ordered that Mr. O'Meara and Omega cease all operations at the Site and cooperate fully in all efforts to investigate and implement appropriate action at the Site.

March, 1995: Dennis O'Meara pleads guilty to two felony counts of illegal storage and disposal.

May, 1995: US EPA issued an Unilateral Administrative Order (UAO) to Omega Chemical Corporation, Dennis O'Meara (president and operator at the site) and the generators of hazardous substances who each sent more than ten tons of hazardous substances to the Site. This Order required the Respondents to remove approximately 2,700 drums at the Site and to dispose, stabilize, or treat grossly contaminated concrete, asphalt and/or soils found at or near the surface and to conduct surface and subsurface soil sampling and groundwater sampling to determine the nature and extent of contamination.

February, 2001: US EPA and OPOG enter into a partial Consent Decree to address soil and groundwater contamination on the Omega property and immediately downgradient. The Consent Decree includes the following tasks: (1) design and implement a

groundwater containment and mass treatment system in the Phase 1a (OU-1) Area (including conducting a groundwater EE/CA); (2) implement a vadose zone Remedial Investigation/Feasibility Study (RI/FS) for contaminant releases on or emanating from the Omega Property; and (3) install three sentinel groundwater monitoring wells and conduct quarterly sampling for one year.

2. Current actions

July, 2004: US EPA issued a Unilateral Administrative Order to 19 PRPs to install and sample additional OU-2 groundwater monitoring wells. The wells are currently being installed and will be used into determining the nature and extent of OU-2 contamination.

C. State and Local Authorities' Roles

EPA has informed DTSC and the City of Whittier of the proposed action. Neither entity will be actively involved in the construction or operation and maintenance of the interim treatment system. EPA anticipates that DTSC will be involved in reviewing design documents.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

Section 300.415(b)(2) of the National Contingency Plan (NCP) lists a number of factors for EPA to consider in determining whether a removal action is appropriate. Specifically, Section 300.415(b)(2)(ii) states: "Actual or potential contamination of drinking water supplies or sensitive ecosystems" and is the applicable factor for the Omega Chemical Site.

The nearest drinking water well to the former Omega property is Santa Fe Springs Well Number One, approximately 1.3 miles downgradient. This well, which is screened from 200 feet to 900 feet bgs, is used by the City of Santa Fe Springs as a water supply well. Contamination detected in groundwater on the former Omega property is not currently contained and may have migrated over two miles laterally downgradient. Contamination has also moved vertically to at least 185 feet bgs. Therefore the contamination could migrate, or may already be present, in the deeper aquifers used for public drinking water.

The highest concentration of PCE contamination detected in groundwater on the Omega Property is 210,000 ug/l as compared to a federal drinking water standard of 5 ug/l. Although PCE concentrations within OU-1 have varied from quarter to quarter, they have consistently been above 10,000 ug/L. If the high contaminant concentrations are not contained, they will continue to migrate laterally downgradient, and may also migrate vertically into the deeper drinking water aquifers, impacting the approximately 113,000 residents in the City of Santa Fe Springs.

1. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby human populations, animals or the food chain

PCE and TCE are hazardous substances as defined in CERCLA Section 101(14). Exposure to PCE and TCE in humans is known to cause, among other things, nervous system effects, liver and lung damage, and impaired heart function. 1,1-DCE is also considered to be a possible cancer-causing chemical based on limited studies in laboratory animals. Freons are also contaminants of concern. They are less toxic than the VOCs described above but at very high levels may affect the nervous system. High concentrations of 1,4-dioxane at OU-1 are of concern because this compound is a suspected carcinogen.

2. High levels of hazardous substance or pollutants or contaminants in soils at or near the surface that may migrate

Because of the depth at which groundwater is first encountered on the former Omega property (approximately 70 feet bgs at OW-1) and the predominance of fine-grained silts and clays in the unsaturated zone, it is likely that DNAPL is bound up in the unsaturated zone soils. Also, based on the variability of PCE and TCE levels in OW-1, VOC concentrations in groundwater could be controlled by leaching from the unsaturated zone rather than by dissolution from DNAPL within the saturated zone.

Based on existing PCE soil data, elevated concentrations are present in the upper ten feet of the vadose zone on the northwest side of the former Omega property. The lateral extent of elevated PCE concentrations in soil increases at depths below 40 feet bgs. There is an ongoing soils investigation within OU-1 to more completely determine the nature and extent of vadose zone contamination and to identify discrete source areas.

B. Threats to the Environment

There are no known sensitive environmental receptors within the Omega Site area.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of pollutants and contaminants at this Site, if not addressed by implementing the response action selected in this Action Memorandum, will continue to present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS

A. Proposed Action

1. Proposed Action Description

The proposed action will prevent further migration of highly contaminated groundwater from the OU-1 area through the use of a groundwater pump and treatment system. Approximately 28 gallons per minute (gpm) would be extracted from five proposed wells within the Putnam Street right of way. Treatment of extracted groundwater would include a combination of the Advanced Oxidation Process (AOP) using hydrogen peroxide and ozone to remove 1,4-dioxane, followed by granular activated carbon (GAC) to remove the remaining contaminants. After treatment, groundwater would likely be discharged under a National Pollutant Discharge Elimination System (NPDES) permit to the storm drain or sanitary sewer. Re-injection of treated water would be considered if a suitable location can be identified.

2. Contribution to remedial performance

The primary goal of the proposed interim removal action is to contain the highest levels of contamination dissolved in groundwater within OU-1, so that they do not migrate and contribute to the OU-2 plume. To achieve this goal, five groundwater extraction wells would be installed within the Putnam Street right of way to form a hydraulic barrier along the primary flow pathway for downgradient contaminant migration.

The proposed action will also be a component of the final remedy selected for the Omega Site. EPA is currently performing an OU-2 RI/FS and overseeing a PRP-lead OU-1 vadose zone RI/FS. The remedies selected through those investigations will be integrated with the proposed interim removal action as part of the final Site remedy.

3. Description of alternative technologies

The proposed groundwater extraction and treatment technologies are expected to be effective in removing contaminants from the subsurface and preventing downgradient migration. However, disposal of treated water may be limited by regulatory requirements. The permitting agency for sewer discharges is the Los Angeles County Sanitation District (LACSD). LACSD has expressed a preference that other re-use and discharge options be exhausted before sewer discharge from the Omega treatment system is considered. The Los Angeles Regional Water Quality Control Board (RWQCB) is the permitting agency for storm drain discharge and re-injection. The RWQCB does not have a preference regarding discharge of treated water from the Omega system.

For these reasons, storm drain discharge is the most likely method for disposal of treated water, followed by discharge to the sanitary sewer. Re-injection will also be evaluated but is considered least likely because of the limited infiltration capacity of OU-1 soils and the difficulty in finding an acceptable location for re-injection.

4. Engineering Evaluation/Cost Analysis (EE/CA)

OPOG completed an EE/CA in July 2005 that included an evaluation of three potential removal actions that could contain groundwater contamination within OU-1. The three alternatives are summarized as follows:

1. Groundwater extraction on the former Omega property, where the highest contaminant concentrations have been found. The estimated groundwater extraction rate under this alternative would be five gallons per minute (gpm). Treatment to remove VOCs would include AOP, followed by liquid phase GAC. After treatment, groundwater would likely be discharged to the storm drain or sanitary sewer. Re-injection of treated water would be considered if a suitable location can be identified.
2. Groundwater extraction at Putnam Street. The estimated groundwater extraction rate under this alternative would be 28 gpm. This alternative would allow for containment of contaminated groundwater over a larger area than under Alternative 1. Treatment and discharge processes would be the same as for Alternative 1.
3. Groundwater extraction at Putnam Street and treatment using the same technologies as for Alternatives 1 and 2. Re-injection of approximately one-fourth of the treated water would occur on the Omega property. Sodium lactate, an electron donor, would be added to the re-injected water to promote enhanced anaerobic biodegradation (EAB).

EPA issued a Proposed Plan in August 2005 which indicated that Alternative 2 is EPA's preferred alternative. Public comments were accepted from August 8, 2005 through September 7, 2005 and a public meeting was held in Whittier on August 22, 2005. A summary of EPA's response to public comments is attached to this Action Memorandum. One comment letter was received; the comments did not change EPA's preference that Alternative 2 become the selected action or any of the elements of that alternative.

5. Applicable or relevant and appropriate requirements

CERCLA 121(e)(1) provides that removal and remedial actions carried out under CERCLA do not require federal, state or local permits. However, 40 C.F.R. § 300.415(j) requires removal actions, to the extent practicable considering the exigencies of the situation, to attain applicable or relevant and appropriate requirements (ARARs) under federal and, where more stringent, state laws. A summary of ARARs for the selected removal action is attached to this Action Memorandum.

If the treated water is discharged into the sewer system, the discharge would be considered off-site. Therefore, the regulations regarding discharges to a publicly owned treatment works (POTW) are not ARARs and the removal action must be implemented to comply with all substantive and procedural requirements set by the Los Angeles County Sanitation District.

See General Pretreatment Regulations for Existing and New Sources of Pollution, 40 CFR Part 403; County Sanitation District of Los Angeles County Wastewater Ordinance “Guidelines for the Discharge of Rainwater, Storm Water, Groundwater, and Other Water Discharges” (July 1, 1998).

As part of the response action described above, EPA is waiving the ARARs for groundwater quality objectives, groundwater quality cleanup standards and the groundwater monitoring requirements used to evaluate the effectiveness of a completed corrective action, as they would otherwise apply to the removal action based on the waiver provision for interim measures. See 40 C.F.R. Section 300.415(j) and 40 C.F.R. Section 300.430(f)(1)(ii)(C). This means that EPA’s response action, as selected by this Action Memorandum, would not be required to meet these ARARs and also that EPA will continue to evaluate whether additional response actions could, if implemented, achieve the ARARs. EPA’s waiver of these ARARs at the recommended removal action is based on the following:

i) the proposed removal action is intended to serve as an interim measure (whose scope is to contain the contaminated groundwater in OU-1 rather than restore the aquifer in this area) while EPA completes its full investigation of the Omega Site; and

ii) the proposed removal action will not interfere with any final response action should any additional and final response action be selected by EPA.

6. Project schedule

Following completion of this Action Memorandum, OPOG will prepare a combined Removal Action Plan and 30% Design Report. The combined report is scheduled to be submitted to EPA in October 2005. After EPA approves the 30% Design, OPOG will complete the design and, following EPA approval, begin construction.

7. Estimated Costs

OPOG is expected to implement and fund this removal action under the terms of its Partial Consent Decree with EPA. EPA oversight costs will also be recovered from OPOG under the terms of the Partial CD.

The estimated 30-year net present worth of the proposed action is \$6.4 million, including \$2.7 million in capital costs and \$3.7 million in operation and maintenance costs.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If action is significantly delayed or not taken, the threat discussed in Section III above will continue and may increase.

Attachments

1. Summary of ARARs
2. Responsiveness summary to public comments
3. Index to the Administrative Record

Figures:

1. Property location
2. Operable Unit One map
3. Operable Unit Two map

Attachment 1

Summary of ARARs

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
CHEMICAL-SPECIFIC CRITERIA					
State Regulatory Requirement	Groundwater	DTSC Hazardous Waste Regulations Hazardous Waste Definition Standards 22 CCR Part 261	Applicable	Contaminated groundwater once extracted for treatment, must be managed as state and federal hazardous waste if such groundwater contains levels of hazardous substances that meet or exceed state and federal hazardous waste toxicity criteria for specific hazardous wastes and/or contains one or more RCRA-listed hazardous wastes.	The determination of whether wastes generated during removal action activities are hazardous will be made at the time the wastes are generated. Contaminated media treated to specified cleanup levels will no longer need to be managed as a hazardous waste.
ACTION-SPECIFIC CRITERIA					
Federal Regulatory Requirement	Groundwater	National Pollutant Discharge Elimination System (NPDES) Clean Water Act (CWA) § 402 <i>et seq.</i>	Applicable	The NPDES requirements are applied to point and nonpoint discharge sources. Substantive requirements include the establishment of discharge limitations, monitoring requirements, and best management practices (BMPs) for surface water discharges. The regulations are applicable to the control of contaminants to stormwater runoff from a treatment plant construction site and groundwater treatment systems.	BMPs will be enacted to eliminate and/or reduce potential contaminant migration pathways to storm water runoff.
Federal and State Regulatory Requirement	Groundwater	NPDES Point Source Discharge 40 CFR 122-125	Applicable	The substantive provisions of an NPDES permit for discharges to a State body of water (i.e., waste discharge requirements) will apply if	The treated water that will be discharged to the San Gabriel River or storm drain will comply with the waste

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
		California Water Code 13385 (et seq.)		the treated water is discharged to the San Gabriel River or storm drain.	discharge requirements.
State Regulatory Requirement	Groundwater	California Constitution Article X, Section 2	Applicable	The State's Constitution has declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.	The treated water will be conserved for beneficial use to the fullest extent possible.
State Regulatory Requirement	Groundwater	SWRCB Resolution 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters in California Water Code §13140	Applicable	The State's Antidegradation Policy as set forth in State Board Resolution 68-16 requires that existing high quality water be maintained. Any discharge of waste into an existing high quality water must employ "best practicable treatment or control" necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained. Applies to the discharge of waste to waters including re-injection into the aquifer.	If treated groundwater is re-injected into the aquifer, the response action will meet these requirements.

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
State Regulatory Requirement	Soil	California Water Code §§13140-13147, 13172, 13260, 13263, 13267, 13304 27 CCR Div. 2, Subdiv. 1, Chap. 3, Subchap. 2, Art. 2	Applicable	Wastes classified as a threat to water quality (designated waste) may be discharged to a Class I hazardous waste or Class II designated waste management unit. Nonhazardous solid waste may be discharged to a Class I, II, or III, waste management unit. Inert waste would not be required to be discharged into a SWRCB-classified waste management unit (27 CCR §20200 <i>et seq.</i>). The requirement is applicable because CERCLA waste as a result of investigation-derived waste may be generated and would be disposed at a EPA Region IX approved facility in accordance with CERCLA.	Waste streams not meeting cleanup criteria will be classified for disposal to appropriate permitted offsite waste management units. CERCLA waste (e.g. contaminated soil, spent GAC) will be disposed at an offsite disposal facility.
State Regulatory Requirement	Soil and Groundwater	California Hazardous Waste Control Law H&S Code Div. 20, Chap. 6.5 Identification and Listing of Hazardous Waste 22 CCR Div. 4.5, 22 CCR §66264.13 22 CCR §66260.200	Applicable	The California law is more stringent than federal hazardous waste law and is applied to this Site. A generator must determine if the waste is classified as a hazardous waste in accordance with the criteria provided in these requirements. Waste characteristics of treated soil and groundwater will be defined prior to treatment and disposal. This methodology to characterize waste at the Site may determine that some of the waste at the Site meet the characteristics of hazardous waste.	The determination of whether wastes generated during removal action activities, such as soil cuttings from well installation and treatment residues, are hazardous will be made when the wastes are generated.
Federal and State	Soil and Groundwater	Hazardous Waste Security	Relevant and	Any proposed treatment facility is anticipated to maintain a fence in good	Although this is not a hazardous waste facility, the

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
Regulatory Requirement		22 CCR §66264.14	Appropriate	repair which completely surrounds the active portion of the facility. A locked gate at the facility should restrict unauthorized personnel entrance. The security standards to prevent entry from unauthorized personnel for the proposed removal action alternative should be applied.	selected remedy will comply with these regulations as specified.
Federal and State Regulatory Requirement	Soil and Groundwater	Hazardous Waste Regulations Accumulation Time 22 CCR §66262.34	Applicable	Onsite hazardous waste accumulation is allowed for up to 90 days as long as the waste is stored in containers or tanks, on drip pads, inside buildings, is labeled and dated, etc.	If wastes generated during removal action activities are hazardous, they will be managed to comply with these requirements.
Federal and State Regulatory Requirement	Soil and Groundwater	Hazardous Waste Facility General Inspection Requirements and Personnel Training 22 CCR §§66264.15 - 66264.16	Relevant and Appropriate	The hazardous waste facility standards require routine facility inspections conducted by trained hazardous waste facility personnel. Inspections are to be conducted at a frequency to detect malfunctions and deterioration, operator errors, and discharges which may be causing or leading to a hazardous waste release and a threat to human health or the environment.	Although this is not a hazardous waste facility, the selected remedy will incorporate an operation and maintenance program to be implemented by trained personnel.
Federal and State Regulatory Requirement	Soil and Groundwater	Preparedness and Prevention 22 CCR Div. 4.5, Chap. 14, Art. 3	Relevant and Appropriate	This regulation requires that the facility's design and operation minimize the potential for fire, explosion, or unauthorized release of hazardous waste.	Although this is not a hazardous waste facility, selected remedy will be properly designed, operated and maintained to comply with substantive requirements.
Federal and State Regulatory	Soil and Groundwater	49 CFR Parts 173,178,179	Applicable	Generators who transport hazardous waste for off-site treatment, storage or disposal shall prepare a Manifest in	The selected removal action will comply with these regulations as specified.

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
Requirement		22 CCR Div. 4.5, Capt. 12 22 CCR §66262.20		accordance with these regulatory provisions.	
Federal and State Regulatory Requirement	Soil and Groundwater	Use and Management of Containers 22 CCR Div. 4.5, Chap. 14, Art. 9	Applicable	This regulations requires that a generator maintain container and dispose to a Class I hazardous waste disposal facility within 90 days. Storage of investigation-derived waste (<i>i.e.</i> , soil cuttings and well development) will be generated. Requirements may apply for the storage of contaminated groundwater and sediments trapped by the bag filter during start-up operation. The 90-day storage limit is to not create a greater environmental hazard than already exists.	If waste is determined to be RCRA hazardous waste, waste contained onsite will be maintained in a container in good condition prior to offsite disposal to appropriate permitted offsite waste management units.
Federal and State Regulatory Requirement	Groundwater	Tank Systems 22 CCR Div. 4.5, Chap. 14, Art. 10	Relevant and Appropriate	Minimum design standards (<i>i.e.</i> , shell strength, foundation, structural support, pressure controls, seismic considerations) for tank and ancillary equipment are established. The requirements for minimum shell thickness and pressure controls to prevent collapse or rupture is to not create a greater environmental hazard than already exists.	Although this is not a hazardous waste facility, the selected remedy will be properly designed, operated and maintained to comply with substantive requirements.
State Regulatory Requirement	Soil and Groundwater	Miscellaneous Units Requirements 22 CCR Div. 4.5, Chap. 14, Art. 16 22 CCR §66264.601 - 66264.603	Relevant and Appropriate	Minimum performance standards are established for miscellaneous equipment to protect health and the environment. Treatment of hazardous waste through an air stripper or granulated activated carbon (GAC) would qualify as a RCRA miscellaneous unit if the contaminated water constituted a hazardous waste. Therefore, the substantive requirements for miscellaneous units and related	Although this is not a hazardous waste facility, the selected remedy will be properly designed, operated and maintained to comply with substantive requirements.

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
				substantive closure requirements may be relevant and appropriate for the Site.	
Federal and State Regulatory Requirement	Groundwater	General Pretreatment Regulations for Existing and New Sources of Pollution 40 CFR Part 403 County Sanitation District of Los Angeles County Wastewater Ordinance “Guidelines for the Discharge of Rainwater, Storm Water, Groundwater, and Other Water Discharges” (July 1, 1998)	Applicable	No person can discharge or cause to be discharged, groundwater into any sewage facility which directly or indirectly discharges to facilities owned by the District, except where prior approval for such discharges is given by the CSLAC.	If treated groundwater is discharged to the sewage system, the substantive regulatory requirements will be met.
State Regulatory Requirement	Air	Regulation IV, Rule 402, Nuisance	Applicable	A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property.	The selected removal action will comply with these regulations as specified.
State Regulatory Requirement	Air	Regulation IV, Rule 403, Fugitive Dust	Applicable	Emissions of fugitive dust shall not remain visible in the atmosphere beyond the property line of the emission source.	The selected remedy will comply with these regulations as specified.

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
				Activities conducted in the South Coast Air Basin shall use best available control measures to minimize fugitive dust emissions and take necessary steps to prevent the track-out of bulk material onto public paved roadways as a result of their operations.	
State Regulatory Requirement	Air	Regulation IV, Rule 404, Particulate Matter – Concentration.	Applicable	Particulate matter in excess of the concentration standard conditions shall not be discharged from any source. Particulate matter in excess of 450 milligrams per cubic meter (0.196 grain per cubic foot) in discharged gas, calculated as dry gas at standard conditions, shall not be discharged to the atmosphere from any source.	The selected remedy will comply with these regulations as specified.
State Regulatory Requirement	Soil	Land Disposal Restrictions 22 CCR §66268	Applicable	All hazardous wastes are prohibited from land disposal unless the wastes have been exempted, granted a variance or an extension under State law, or unless the wastes meet the applicable treatment standards.	The selected removal action will comply with these regulations as specified.
LOCATION-SPECIFIC CRITERIA					
State Regulatory Requirement	Soil and Groundwater	Hazardous Waste Seismic Considerations 22 CCR §66264.18 22 CCR §66264.25	Relevant and Appropriate	Portions of a new hazardous waste facility where treatment, storage, or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault which has had displacement in Holocene time.	Although this is not a hazardous waste facility, the selected removal action will comply with these regulations as specified.
TO-BE-CONSIDERED (TBC) CRITERIA that have been adopted as Performance Standards					
State Guidance	Soil and Groundwater	California Well Standards California Department of Water Resources	TBC	This is a supplement to Bulletin 74-81(domestic water well standards) that address minimum specifications for monitoring wells, extractions wells,	Design and construction specifications are considered for construction and destruction of wells and

Authority	Medium	Requirement	Status	Synopsis of Requirement	Action to be Taken to Attain Requirement
		Bulletin 74-90		injection wells, and exploratory borings. Design and construction specifications are considered for construction and destruction of wells and borings.	borings.

Attachment 2 Responsiveness Summary

This Responsiveness Summary portion of the Action Memorandum presents the U.S. Environmental Protection Agency's (EPA's) responses to written comments received during the public comment period. A public meeting was held on August 22, 2005 in Whittier, California, but no verbal comments were received during that meeting. Comments are presented in italics and EPA's responses in plain text.

Comments from Thomas W. Evins, community member, in a letter dated August 23, 2005:

A. *I contend that the contamination migrating problem is not as serious as EPA is making it out to be for the following reasons.*

- 1. Omega began operations in 1976. Let's assume the dirty deed began 1980. The soil was becoming increasingly soiled up to 1991 and contaminants were migrating down-stream. Roughly eleven years of soil contamination with no public water problems.*
- 2. Now we learn contaminated soil had been removed from the site, which by some degree reduces the chance of contaminated soil and/or water from migrating. I'm guessing the soil removal took place 1996-97?*
- 3. Bear in mind some 5 years or so had gone by after soil contamination stopped with no damage to the public water system.*
- 4. Since the water table is dynamic, there is constant water replacement.*
- 5. It is now 2005, some 14 years during which the soil has been 'washed' and it seems reasonable to me that the chances of further water contamination become less and less as time goes by.*

EPA's response: Based on the available data, it is clear that there is at least one continuing source of groundwater contamination associated with the former Omega property. If there were no continuing source, groundwater contaminant concentrations would be expected to decrease. In fact, some contaminant concentrations are increasing. The source(s) could be contaminated soil and/or concentrated liquid contamination known as dense non-aqueous phase liquid (DNAPL).

Therefore, it is not correct to assume that soil and groundwater contaminant concentrations will decrease by virtue of groundwater recharge. Rather, without the active containment system that EPA has proposed, the groundwater plume will continue to expand and become more costly to clean up.

1. *Option 2 appears to be the most reasonable treatment of the 3 choices.*

However, Option 2 suggests a 30-year treatment cycle but it must be remembered that 14 years has already gone by, leaving only 16 years of treatment needed? The operation and maintenance costs should be reduced to half of the estimated \$3.7 million.

EPA's response: Alternative 2, which was EPA's preferred alternative, is a containment remedy designed to keep highly contaminated groundwater from flowing into the area downgradient of OU-1. It is highly unlikely that Alternative 2, on its own, would be capable of cleaning up the contaminated groundwater in OU-1 within 30 years. The 30-year time period was used in the EE/CA as a basis for comparing the costs of this alternative with other alternatives. Typically, the present value of costs that occur more than 30 years in the future is insignificant compared to those that occur in the first 30 years, and they are thus not considered when doing cost comparisons. When a final remedy is selected for the Omega Site, EPA hopes to have a better estimate of the time required for cleanup.

Attachment 3

Index to the Administrative Record

Omega Chemical Corporation
Non-Time-Critical Removal Administrative Record

Doc Date	Author / Auth. Org.	Addressee / Addr. Org.	Title/Subject	Access Codes	Doc ID#
2/26/2000	US Dept of Justice - Environment & Natural Resources Div		Consent decree (CD) #CV 00-12471-TJH, USA v Abex Aerospace Div et al, w/apps A-F (SOW, map, defendants lists, UAO #95-15 & schedule) & atch (notice of lodging)	REL	95488
11/28/2000	Environmental Protection Agency - Region 9		Fact Sheet: Hoja de informacion, w/TL to M Schultz fr K Brasaemle	REL	88072650
12/1/2000	Environmental Protection Agency - Region 9		Fact Sheet: Public input requested (includes Spanish translation)	REL	88073559
12/22/2000	Environmental Protection Agency - Region 9	Whittier Daily News	Public Notice: Requests public comment on consent decree	REL	88073563
4/20/2001	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Downgradient well installation & groundwater monitoring sampling & analysis plan (SAP), w/TL to N Riveland-Har fr S Wallin	REL	88072824
4/26/2001	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Data summary rpt for on-site soils, w/TL to N Riveland-Har fr S Wallin 4/27/2001	REL	88072694
7/1/2001	Environmental Protection Agency - Region 9		Fact Sheet: Consent decree signed - work begins at site	REL	88073803
7/19/2001	Jacqueline Lane / Environmental Protection Agency - Region 9	Cynthia Birt / City of Whittier - Public Library	TL: Fact sheet re consent decree	REL	88073802
7/23/2001	Environmental Protection Agency - Region 9		Community involvement plan	REL	88072696
12/4/2001	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Data summary rpt for on-site soils, w/apps A-D & TL to N Riveland-Har fr S Wallin	REL	88072806
4/1/2002	Environmental Protection Agency - Region 9		Fact Sheet: Progress at site	REL	88073915
4/1/2002	Environmental Protection Agency - Region 9		Fact Sheet: Progreso en el sitio	REL	88073919
4/24/2002	Environmental Protection Agency - Region 9		Mtg Notice: Community meeting (English & Spanish)	REL	2067733
5/31/2002	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Sampling & analysis plan (SAP) addendum for additional data collection in phase 1a area, w/TL to N Riveland-Har fr S Wallin	REL	88072826
7/26/2002			Site data summary - groundwater data listing, 1st quarter, 2002	REL	88072820
9/27/2002	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on SAP amendment, additional investigation in phase 1a area, RI/FS workplan	REL	2070482
9/30/2002	Nancy Riveland-Har / Environmental Protection Agency - Region 9	Jane Diamond / Environmental Protection Agency - Region 9	Memo: Engineering evaluation/cost analysis (EE/CA) approval memo for addressing contaminated groundwater (01 EE/CA Start 001)	REL	121851
11/28/2002	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on FSP & QAPP for RI/FS oversight	REL	2070483
12/23/2002	Environmental Protection Agency - Region 9		List of EPA guidance documents consulted during development & selection of response action for site	REL	88073957
2/1/2003	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Groundwater monitoring rpt, 2nd quarter 2002, w/TL to L Henning fr C Yuge 2/11/03	REL	2010392
2/4/2003	DataChem Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 31171, SDG Y0MS8, 16 water samples for volatiles, collected 11/14-11/22/02, w/o computer disk (Unscanned document target only)	REL	2071788
2/6/2003	Shealy Environmental Services, Inc	Environmental Protection Agency - Region 9	Data package - Case 31171, SDG Y0MS4, 8 water samples for volatiles, collected 11/13-11/15/02, w/o computer disk (Unscanned document target only)	REL	2071789
2/11/2003	Nanny Estrada / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31171, SDG Y0MS4, 8 water samples for volatiles, collected 11/13-11/15/02, w/TL to N Riveland-Har fr D Lindelof	REL	2010250
2/11/2003	Shealy Environmental Services, Inc	Environmental Protection Agency - Region 9	Data package - Case 31171, SDG Y0MT8, 11 water samples for volatiles, collected 11/18-11/26/02, w/o computer disks (Unscanned document target only)	REL	2071790
2/12/2003	DataChem Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 31171, SDG Y0MX5, 8 water samples for volatiles, collected 11/25-11/26/02, w/o computer disk (Unscanned document target only)	REL	2071791
2/13/2003	Nanny Estrada / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31171, SDG Y0MX5, 8 water samples for volatiles, collected 11/25-11/26/02, w/TL to N Riveland-Har fr D Lindelof	REL	139699

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2/19/2003	EMAX Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 11-BCC0-51.0, SDG 03B140, 5 water samples for dissolved gases, collected 2/18/03 (Unscanned document target only)	REL	2071792
2/21/2003	EMAX Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 11-BCC0-51.0, SDG 03B155, 8 water samples for dissolved gases, collected 2/19 & 2/20/03 (Unscanned document target only)	REL	2071793
2/24/2003	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	On-site soil RI/FS workplan (final-draft)	REL	147037
2/24/2003	EMAX Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 11-BCC0-51.0, SDG 03B162, 5 water samples for dissolved gases, collected 2/21/03 (Unscanned document target only)	REL	2071794
2/25/2003	EMAX Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 11-BCC0-51.0, SDG 03B166, 5 water samples for dissolved gases, collected 2/24/03 (Unscanned document target only)	REL	2071795
2/26/2003	Sentinel, Inc	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG MY0TF1, 13 water samples for inorganics, w/inventory checklist, w/o computer disk (Unscanned document target only)	REL	2071796
2/27/2003	Nanny Estrada / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31171, SDG Y0MT8, 11 water samples for volatiles, collected 11/18-11/26/02, w/TL to N Riveland-Har fr D Lindelof	REL	149022
2/27/2003	EMAX Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 11-BCC0-51.0, SDG 03B177, 5 water samples for dissolved gases, collected 2/25/03 (Unscanned document target only)	REL	2071797
2/27/2003	EMAX Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 11-BCC0-51.0, SDG 03B188, 6 water samples for dissolved gases, collected 2/26/03 (Unscanned document target only)	REL	2071798
2/27/2003	Sentinel, Inc	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG MY0TF0, 13 water samples for inorganics, w/inventory checklist, w/o computer disk (Unscanned document target only)	REL	2071799
3/5/2003	EMAX Laboratories, Inc	Environmental Protection Agency - Region 9	Data package - Case 11-BCC0-51.0, SDG 03C008, 4 water samples for dissolved gases, collected 3/3/03 (Unscanned document target only)	REL	2071800
3/7/2003	Sentinel, Inc	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG MY0TE8, 19 water samples for inorganics, w/inventory checklist, w/o computer disk (Unscanned document target only)	REL	2071801
3/7/2003	Sentinel, Inc	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG MY0TE9, 19 water samples for inorganics, w/inventory checklist, w/o computer disk (Unscanned document target only)	REL	2071802
3/14/2003	Rose Fong / Environmental Protection Agency - Region 9	Diane Strassmaier / Environmental Protection Agency - Region 9	TL: Data packages - SDGs MY0TE8, MY0TE9, MY0TF0, & MY0TF1	REL	2010249
3/14/2003	Sentinel, Inc	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG MY0TE6, 5 water samples for 1,4 dioxane, collected 2/24-3/3/03, w/o computer disk (Unscanned document target only)	REL	2071803
3/20/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results - Case R03S34, SDGs 03050A, 03057A, 31 water samples for total dissolved solids w/TL to L Henning fr B Bettencourt	REL	149411
3/26/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG Y0TP9, 10 water samples for 1-4 Dioxane, w/o computer disk (Unscanned document target only)	REL	2071804
4/13/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG Y0TP6, 10 water samples for volatiles, collected 2/24-3/3/03, w/o computer disk (Unscanned document target only)	REL	2071805
4/15/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG Y0TP8, 12 water samples for volatiles, collected 2/18-3/21/03, w/o computer disk (Unscanned document target only)	REL	2071806

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4/16/2003	Nanny Estrada / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31445, SDG Y0TP6, 10 water samples for volatiles, collected 2/24-3/3/03, w/TL to D Strassmaier fr D Lindelof	REL	149037
4/16/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG Y0TR4, 5 water samples for 1,4 Dioxane, collected 2/24-3/3/03, w/o computer disk (Unscanned document target only)	REL	2071807
4/17/2003	Nanny Estrada / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31445, SDG Y0TP8, 12 water samples for volatiles, collected 2/18-3/21/03, w/TL to D Strassmaier fr D Lindelof	REL	149105
4/18/2003	Santiago Lee / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31445, SDG Y0TP9, 10 water samples for 1-4 Dioxane, w/TL to D Strassmaier fr D Lindelof	REL	149106
4/21/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG Y0TQ0, 7 water samples for volatiles, collected 2/18-2/21/03, w/o computer disk (Unscanned document target only)	REL	2071808
4/22/2003	Santiago Lee / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31445, SDG Y0TR4, 5 water samples for 1,4 Dioxane, collected 2/24-3/3/03, w/TL to D Strassmaier fr D Lindelof	REL	149107
4/22/2003	Kendra DeSantolo / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31445, SDG Y0TQ0, 7 water samples for volatiles, collected 2/18-2/21/03, w/TL to D Strassmaier fr D Lindelof	REL	149108
4/22/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31445, SDG Y0TQ5, 10 water samples for volatiles, collected 2/24-3/3/03, w/o computer disk (Unscanned document target only)	REL	2071809
4/23/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results - Case R03S34, SDGs 03050A, 03057A, 20 water samples for chloride, sulfate, perchlorate, TOC, alkalinity, sulfide, & Nitrate-N+Nitrite-N, collected 2/18/03-3/11/03 w/TL to L Henning fr B Bettencourt	REL	149447
4/24/2003	Nanny Estrada / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 31445, SDG Y0TQ5, 10 water samples for volatiles, collected 2/24-3/3/03, w/TL to D Strassmaier fr D Lindelof	REL	149114
5/6/2003	Douglas Lindelof / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Diane Strassmaier / Environmental Protection Agency - Region 9	Data Validation Rpt: Case 11-BCCO-51.0, SDGs 03B140, 03B155, 03B162, 03B166, 03B177, 03B188, & 03C008, 38 water samples for dissolved gases	REL	149117
5/28/2003	Agnieszka Jankowski / DataVal, Inc Lisa Norosky / DataVal, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case R03S54, SDG 03135A & 03142A, 15 water samples for 1,4-dioxane, collected 5/13-5/22/2003, w/TL to C Brickner fr D Breaux 4/27/2004, w/o computer disk	REL	2025234
5/28/2003	Agnieszka Jankowski / DataVal, Inc Lisa Norosky / DataVal, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case R03S54, SDG 03135A, 19 water samples for perchlorate, collected 5/13-5/19/2003, w/TL to C Brickner fr D Breaux 4/27/2004, w/o computer disk	REL	2025235
6/1/2003	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Phase 2 groundwater characterization study (w/o Plates 1, 2, & 3)	REL	157949
6/1/2003	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Phase 2 groundwater characterization study (Plates 1, 2, & 3 only)	REL	163870
6/2/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG MY0XJ0, 20 water samples for total metals & cyanide, w/o computer disk (Unscanned document target only)	REL	2071810
6/6/2003	I C F Consulting	Environmental Protection Agency - Region 9	Data package - Case R03S54, SDG 03135A, 11 water samples for 1,4-dioxane, collected 5/13-5/19/03, w/TL to R Bauer fr Z Rajabi 6/3/03 (Unscanned document target only)	REL	2071811
6/9/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG MY0XH2, 12 water samples for total metals & cyanide, w/o computer disk (Unscanned document target only)	REL	2071812
6/9/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG MY0XN0, 19 water samples for dissolved metals, w/o computer disk (Unscanned document target only)	REL	2071813
6/9/2003	I C F Consulting	Environmental Protection Agency - Region 9	Data package - Case R03S54, SDG 03135A, 19 water samples for perchlorate, collected 5/13-5/19/03, w/TL to R Bauer fr O Salvador (Unscanned document target only)	REL	2071814
6/11/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for 5/03 sampling - Project R03S54, SDG 03135A, 11 water samples for 1,4-dioxane, collected 5/13-5/19/03, w/TL to D Strassmaier fr B Bettencourt	REL	2025225

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6/12/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for 5/03 sampling - Project R03S54, SDG 03135A, 19 water samples for perchlorate, collected 5/13-5/19/03, w/TL to D Strassmaier fr B Bettencourt	REL	2025224
6/12/2003	I C F Consulting	Environmental Protection Agency - Region 9	Data package - Case R03S54, SDG 03142A, 4 water samples for 1,4-Dioxane, collected 5/20 & 5/22/03, w/TL to R Bauer fr Z Rajabi (Unscanned document target only)	REL	2071815
6/23/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for 5/03 sampling - Project R03S54, SDG 03142A, 4 water samples for 1,4-Dioxane, collected 5/20 & 5/22/03, w/TL to L Henning fr B Bettencourt	REL	2025223
6/24/2003	Liberty Analytical Corp - CompuChem	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG MY0XM2, 12 water samples for dissolved metals, w/o computer disk (Unscanned document target only)	REL	2071816
6/27/2003	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	(Privileged - FOIA ex 2) Draft rpt addendum for additional data collection in Phase 1A area, w/TL to L Henning fr S Wallin (Privileged document target only)	FX2	2071783
7/8/2003	Clayton Group Services, Inc	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG Y0XG8, 9 water samples for volatiles, collected 5/19-5/21/03, w/o computer disk (Unscanned document target only)	REL	2071817
7/8/2003	Mitkem Corp	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG Y0XG9, 6 water samples for volatiles, collected 5/21-5/22/03, w/o computer disk (Unscanned document target only)	REL	2071818
7/8/2003	Clayton Group Services, Inc	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG Y0XJ1, 9 water samples for volatiles, w/o computer disk (Unscanned document target only)	REL	2071819
7/8/2003	Mitkem Corp	Environmental Protection Agency - Region 9	Data package - Case 31721, SDG Y0XJ2, 20 water samples for volatiles, w/o computer disk (Unscanned document target only)	REL	2071820
9/1/2003	Environmental Protection Agency - Region 9		Fact Sheet: Omega Chemical superfund site update (English & Spanish)	REL	157963
9/1/2003	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Groundwater monitoring rpt, 3rd quarter 2002	REL	2010260
9/1/2003	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Groundwater monitoring rpt, 4th quarter 2002	REL	2010261
9/1/2003	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Groundwater monitoring rpt, 1st quarter 2003	REL	2010262
9/1/2003	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Groundwater monitoring rpt, 2nd quarter 2003	REL	2010263
9/16/2003	Robert Fodor / Science Applications International Corp	Linda Ketellapper / Environmental Protection Agency - Region 9	(Privileged - FOIA ex 7) Email: Initial review of Weston's preliminary phase 2 rpt, w/forward to C Lichens fr L Ketellapper 9/17/03 (Privileged document target only)	FX7	2071784
9/17/2003	Chemtech Consulting Group, Inc	Environmental Protection Agency - Region 9	Data package - Case 32073, SDG MY0ZP5, 20 water samples for total metals & cyanide, collected 8/19-8/25/03, w/o computer disk (Unscanned document target only)	REL	2071821
9/17/2003	Chemtech Consulting Group, Inc	Environmental Protection Agency - Region 9	Data package - Case 32073, SDG MY0ZT5, 20 water samples for dissolved metals, collected 8/19-8/25/03, w/o computer disk (Unscanned document target only)	REL	2071822
9/18/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for 8/03 sampling - Project R03S75, SDG 03232A, 20 water samples for perchlorate, collected 8/19-8/22, & 8/25/03, w/TL to L Henning fr B Bettencourt	REL	2010245
9/18/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for 8/03 sampling - Project R03S75, SDG 03240B, 11 water samples for perchlorate, collected 8/26-8/28/03, w/TL to C Lichens fr B Bettencourt	REL	2010246
9/18/2003	Chemtech Consulting Group, Inc	Environmental Protection Agency - Region 9	Data package - Case 32073, SDG MY0ZR0, 14 water samples for total & dissolved metals, collected 8/26 & 8/27/03, w/o computer disk (Unscanned document target only)	REL	2071823
9/22/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for 8/03 sampling - Project R03S75, SDG 03232A, 8 water samples for 1,4-dioxane, collected 8/19, 8/20, & 8/25/03, w/TL to C Lichens fr B Bettencourt	REL	2010247
9/22/2003	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on rpt addendum for additional data collection in phase 1A area	REL	2067737

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9/24/2003	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for 8/03 sampling - Project R03S75, SDG 03240B, 7 water samples for 1,4-dioxane, collected 8/26-8/28/03, w/TL to C Lichens fr B Bettencourt 9/25/03	REL	2010248
9/29/2003	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Final on-site soils RI/FS work plan	REL	2010264
9/29/2003	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Mtg Notes: OU1 RI schedule, w/TL to C Lichens fr T Perina 10/8/03	REL	2067740
10/1/2003	Chemtech Consulting Group, Inc	Environmental Protection Agency - Region 9	Data package - Case 32073, SDG MY0ZR6, 6 water samples for cyanide, total metals, & dissolved metals, collected 8/28/03, w/o computer disk (Unscanned document target only)	REL	2071824
10/6/2003	CEIMIC Corp	Environmental Protection Agency - Region 9	Data package - Case 32073, SDG Y0ZP5, 18 water samples for volatiles, collected 8/19-8/27/03, w/o computer disks (Unscanned document target only)	REL	2071825
10/7/2003	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on rpt addendum for additional data collection in phase 1A area, w/TL	REL	2067738
10/8/2003	Lori Parnass / CA Environmental Protection Agency - Dept of Toxic Substances Control	Christopher Lichens / Environmental Protection Agency - Region 9	Email: No comments on rpt addendum for additional data collection in phase 1A area	REL	2067739
10/10/2003	CEIMIC Corp	Environmental Protection Agency - Region 9	Data package - Case 32073, SDG Y0ZR6, 4 water samples for volatiles, collected 8/28/03, w/o computer disk (Unscanned document target only)	REL	2071826
10/15/2003	Christopher Lichens / Environmental Protection Agency - Region 9	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Ltr: Discusses & transmits comments re draft rpt addendum for additional data collection in phase 1A area dated 6/27/03, w/attach	REL	2067741
10/20/2003	Mitkem Corp	Environmental Protection Agency - Region 9	Data package - Case 32073, SDG Y0ZP8, 19 water samples for volatiles, collected 8/19-8/27/03, w/o computer disk (Unscanned document target only)	REL	2071827
10/21/2003	Santiago Lee / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 32073, SDG Y0ZP5, 18 water samples for volatiles, collected 8/19, 8/21, & 8/25-8/27/03, w/TL to C Lichens fr D Lindelof	REL	2010252
10/22/2003	Stan Kott / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 32073, SDG Y0ZR6, 4 water samples for volatiles, collected 8/28/03, w/TL to C Lichens fr D Lindelof	REL	2010253
10/27/2003	Santiago Lee / I C F Consulting, Inc/Laboratory Data Consultants, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case 32073, SDG Y0ZP8, 19 water samples for volatiles, collected 8/19-8/27/03, w/TL to C Lichens fr D Lindelof	REL	2010254
10/30/2003	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Schedule for aquifer test	REL	2069746
10/31/2003	Sharon Wallin / Camp Dresser & McKee, Inc	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: Confirms discussions re soil sampling, w/forward to C Lichens fr C McLaughlin 11/1/03	REL	2069747
11/3/2003	Sharon Wallin / Camp Dresser & McKee, Inc	Ed Modiano Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: Sonic drilling starts tomorrow, w/forward to C Lichens fr C McLaughlin	REL	2069748
11/10/2003	Sharon Wallin / Camp Dresser & McKee, Inc	Gregory Taylor / Raytheon Co Ed Modiano Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: Status of Putnam drilling, w/forward to C Lichens fr C McLaughlin	REL	2069749
11/11/2003	Sharon Wallin / Camp Dresser & McKee, Inc	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Memo: Additional investigation in phase 1A area, w/figures 1 & 2 & TL to C Lichens fr C McLaughlin 11/12/03	REL	2069750
11/14/2003	Tom Perina / C H 2 M Hill	Sharon Wallin / Camp Dresser & McKee, Inc	Email: Field work next week	REL	2069751
11/17/2003	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Planned field activities	REL	2069752
11/17/2003	Tom Perina / C H 2 M Hill	Sharon Wallin / Camp Dresser & McKee, Inc	Email: Field work next week, w/forwards	REL	2069753
11/18/2003	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses review of SAP amendment, w/history	REL	2069754

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11/19/2003	Tom Perina / C H 2 M Hill	Sharon Wallin / Camp Dresser & McKee, Inc	Email: Discusses OW-8 pumping test	REL	2069755
11/20/2003	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill	Email: Corrects errors re OW-8 test, w/history	REL	2069756
11/20/2003	Tom Perina / C H 2 M Hill	Sharon Wallin / Camp Dresser & McKee, Inc	Email: Asks for recorded data fr OW-8 test, w/history	REL	2069757
11/20/2003	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9 Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: Discusses CH2M Hill's oversight role, w/history	REL	2069758
12/1/2003	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses previous comments re on-site soils workplan, w/o attech, w/history	REL	2069760
12/1/2003	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	TL: Comments on SAP amendment, additional investigation in phase 1a area, RI/FS workplan, & comments on FSP & QAPP for RI/FS oversight	REL	2070481
1/6/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9 Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: Geoprobe drilling scheduled for 1/19-1/21	REL	2069759
1/13/2004	C H 2 M Hill	Environmental Protection Agency - Region 9	Response to EPA comments on draft FSP & QAPP for RI/FS oversight, w/TL to C Lichens & D Taylor fr T Perina	REL	2070484
1/13/2004	C H 2 M Hill	Environmental Protection Agency - Region 9	Draft QAPP for RI/FS oversight (revision 2), w/o figures, w/TL to C Lichens & D Taylor fr T Perina	REL	2070485
1/13/2004	C H 2 M Hill	Environmental Protection Agency - Region 9	Draft FSP for RI/FS oversight (revision 2), w/o figures, w/TL to C Lichens & D Taylor fr T Perina	REL	2070486
1/15/2004	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on FSP & QAPP for RI/FS oversight, w/TL	REL	2070487
1/26/2004	Lisa Norosky / DataVal, Inc Donna Breaux / DataVal, Inc	Environmental Protection Agency - Region 9	Data Validation Rpt: Case R04S33, SDG 04021B, 1 water & 4 soil samples for VOCs, collected 1/20 & 1/21/2004, w/TL to C Brickner fr D Breaux 5/11/04, w/o computer disk	REL	2025231
2/1/2004	Weston Solutions, Inc	Environmental Protection Agency - Region 9	Groundwater monitoring rpt, 3rd quarter 2003, w/TL to C Lichens fr C Yuge 2/9/04	REL	2010287
2/20/2004	I C F Consulting	Environmental Protection Agency - Region 9	Data package - Case R04S33, SDG 04021B, 1 water & 4 soil sample for VOCs, collected 1/20 & 1/21/04, w/TL to R Bauer fr Z Rajabi (Unscanned document target only)	REL	2071828
3/2/2004	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Groundwater sampling update	REL	2070488
3/4/2004	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Draft comments on QAPP & FSP for OU 2 RI/FS, w/TL	REL	2070490
3/5/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 1/04 split sampling - Project R04S33, SDG 04021B, 1 water & 4 soil samples for VOCs, collected 1/20-1/21/04, w/TL to C Lichens fr B Bettencourt 3/8/04	REL	2018658
3/5/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill	Email: Status of samping work, w/history & forward to C Lichens fr C McLaughlin	REL	2070489
3/16/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 1/04 split sampling - Project R04S33, SDG 04021B, 1 water & 4 soil samples for 1,4-Dioxane, collected 1/20-1/21/04, w/TL to C Lichens fr B Bettencourt 3/17/04	REL	2018659
3/18/2004	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses & transmits analyte list & reportings limits for semivolatiles & metals, w/attchs	REL	2070491
3/19/2004	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Will proceed with submitting proposal for additional groundwater monitoring well, w/history	REL	2070492
3/30/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 2/04 oversight sampling - Project R04S41, SDG 04057E, 4 water samples for VOCs, collected 2/24-2/25/04, w/TL to C Lichens fr B Bettencourt 3/31/04	REL	2018660

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3/30/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 3/04 sampling - Project R04S42, SDG 04063B, 19 water samples for biochemical oxygen demand, collected 3/2-3/5/04, w/TL to C Lichens fr B Bettencourt 3/31/04	REL	2018661
4/1/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9 Tom Perina / C H 2 M Hill	Email: Selection of BC Labs for analysis of soil samples	REL	2070493
4/1/2004	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Responds to selection of BC Labs for analysis of soil samples, w/history	REL	2070494
4/2/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill	Email: Sampling schedule for next week, w/history	REL	2070495
4/2/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Have forwarded QA/QC requirements to BC Labs, w/history	REL	2070496
4/2/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses use of BC Labs to analyze soil samples, w/history	REL	2070497
4/8/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 3/04 sampling - Project R04S42, SDG 04063B, 20 water samples for total dissolved solids, collected 3/2-3/5/04, w/TL to C Lichens fr B Bettencourt 4/9/04	REL	2018662
4/8/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Schedule for soil gas sampling	REL	2070498
4/8/2004	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Working on addendum to workplan that discusses deep well installation & sampling, w/history	REL	2070499
4/12/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 2/04 oversight sampling - Project R04S41, SDG 04057E, 4 water samples for 1,4-dioxane, collected 2/24-2/25/04, w/TL to C Lichens fr B Bettencourt 4/15/04	REL	2018663
4/20/2004	Tom Perina / C H 2 M Hill	David Taylor / Environmental Protection Agency - Region 9	Email: Responds to comments on OU 2 SAP	REL	2070500
4/22/2004	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	TL: Comments on QAPP & FSP for RI/FS oversight addendum 1, & comments on quality assurance program plan for BC Laboratories	REL	2070501
4/22/2004	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on QAPP & FSP for RI/FS oversight addendum 1	REL	2070502
4/22/2004	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on quality assurance program plan for BC Laboratories	REL	2070503
5/3/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 3/04 sampling - Project R04S42, SDG 04063B, 22 water samples for mercury, metals, ICP, & metals, ICP/MS, collected 3/2-3/5/04, w/TL to C Lichens fr B Bettencourt	REL	2025227
5/4/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 3/04 sampling - Project R04S42, SDG 04063B, 22 water samples for alkalinity, anions, carbon-total organic, cyanide-total, nitrogen-ammonia, nitrogen-total kjeldahl, & perchlorate, collected 3/2-3/5/04, w/TL to C Lichens	REL	2025228
5/5/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 3/04 sampling - Project R04S42, SDG 04063B, 22 water samples for 1,4-dioxane, collected 3/2-3/5/04, w/TL to C Lichens fr B Bettencourt	REL	2025229
5/13/2004	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Comments on QAPP & FSP for OU 2 RI/FS, w/TL	REL	2070504
5/26/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 4/04 split sampling - Project R04S52, SDG 04105B, 3 air samples for VOCs-soil gas, collected 4/12 & 4/13/04, w/TL to C Lichens fr B Bettencourt	REL	2025230
6/7/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Memo: Request for installation of additional deeper well, w/TL to C Lichens fr C McLaughlin	REL	2070505
6/8/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: There is dedicated tubing in all 10 wells, w/forward to C Lichens fr C McLaughlin	REL	2070506

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6/8/2004	David Chamberlin / Camp Dresser & McKee, Inc	Chuck McLaughlin / Omega Chemical Site P R P Organized Group Sharon Wallin / Camp Dresser & McKee, Inc Ed Modiano	Email: Responds to CH2M Hill comments on additional deeper well, w/forward to C Lichens fr C McLaughlin	REL	2070507
6/8/2004	Sharon Wallin / Camp Dresser & McKee, Inc	David Chamberlin / Camp Dresser & McKee, Inc	Email: Responds to CH2M Hill comments on additional deeper well, w/forward to C Lichens fr C McLaughlin	REL	2070508
6/8/2004	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	TL: Draft comments on request for installation of additional deeper well	REL	2070521
6/8/2004	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on request for installation of additional deeper well, w/TL	REL	2070522
6/8/2004	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9 David Taylor / Environmental Protection Agency - Region 9	TL: Revised QAPP for OU 2 RI/FS, revised FSP for OU 2 RI/FS, & response to EPA comments on SAP for OU 2 RI/FS	REL	2070532
6/8/2004	C H 2 M Hill	Environmental Protection Agency - Region 9	Revised QAPP for OU 2 RI/FS, w/o figures & app B	REL	2070533
6/8/2004	C H 2 M Hill	Environmental Protection Agency - Region 9	Revised FSP for OU 2 RI/FS, w/o figures & apps A-C	REL	2070534
6/8/2004	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Response to EPA comments on SAP for OU 2 RI/FS	REL	2070535
6/10/2004	Tom Perina / C H 2 M Hill	Mark Wuttig / C H 2 M Hill Christopher Lichens / Environmental Protection Agency - Region 9	Email: Summary of OPOG's most recent investigation, w/history	REL	2070509
6/14/2004	Dan Jablonski / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Update on OU 2 6/04 groundwater sampling	REL	2070510
6/14/2004	Mark Wuttig / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Request for cross section of groundwater wells	REL	2070511
6/17/2004	David Taylor / Environmental Protection Agency - Region 9	Artemis Antipas / C H 2 M Hill	Email: Discusses options for validation support	REL	2070512
6/25/2004	Dan Jablonski / C H 2 M Hill	Mary O'Donnell / Environmental Protection Agency - Region 9	Email: Summary of OU 2 6/04 groundwater sampling	REL	2070513
7/2/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Rescheduled drilling date for OW-9 on Putnam	REL	2070514
7/6/2004	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Drawing: Draft cross section, w/TL to C Lichens fr S Wallin	REL	2070515
7/7/2004	Artemis Antipas / C H 2 M Hill	Tom Perina / C H 2 M Hill	Email: Response to options for validation support, w/history & forward to A Artemis & D Taylor fr T Perina 7/12/04	REL	2070516
7/8/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 3/04 sampling - Project R04S42, SDG 04063B, 22 water samples for 1,4-dioxane, collected 3/2-3/5/04, w/TL to C Lichens fr B Bettencourt (revised rpt)	REL	2027930
8/2/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 6/04 sampling - project R04S63, SDG 04168C, 20 water samples for total dissolved solids, collected 6/15-6/22/04, w/TL to C Lichens fr B Bettencourt	REL	2031833
8/2/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 6/04 sampling - project R04S63, SDG 04176A, 10 water samples for total dissolved solids, collected 6/23 & 6/24/04, w/TL to C Lichens fr B Bettencourt	REL	2031834
8/4/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 6/04 sampling - project R04S63, SDG 04168C, 20 water samples for biochemical oxygen demand, collected 6/15-6/22/04, w/TL to C Lichens fr B Bettencourt	REL	2031835
8/4/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 6/04 sampling - project R04S63, SDG 04176A, 10 water samples for biochemical oxygen demand, collected 6/23 & 6/24/04, w/TL to C Lichens fr B Bettencourt	REL	2031836

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8/4/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 2004 indoor air sampling - project R04S77, SDG 04216A, 8 air samples collected 7/30 & 7/31/04, analyzed for VOCs & soil gas, w/TL to C Lichens fr B Bettencourt (draft)	REL	2050563
8/17/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9 Tom Perina / C H 2 M Hill	Email: Discusses & transmits e-log & draft lithologic log fr OW9 pilot boring, w/attchs	REL	2067735
8/17/2004	Tom Perina / C H 2 M Hill	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: Sending OU 2 SAP on CD through mail	REL	2070517
8/17/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill	Email: Discusses OW-9 drilling, w/history	REL	2070518
8/17/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill	Email: Corrects previous email re OW-9 drilling, w/history	REL	2070519
8/17/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill Christopher Lichens / Environmental Protection Agency - Region 9	Email: Status of OW-9 drilling	REL	2070520
8/17/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Proposed screened interval for well OW9, w/attach & TL to T Perina & C Lichens fr S Wallin 8/18/04	REL	2070523
8/18/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 6/04 sampling - project R04S63, SDG 04176A, 11 water samples collected 6/23 & 6/24/04, analyzed for 1,4-Dioxane, w/TL to C Lichens fr B Bettencourt 8/19/04	REL	2033876
8/20/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 6/04 sampling - project R04S63, SDG 04168C, 20 water samples collected 6/15-6/22/04, analyzed for 1,4-Dioxane, w/TL to C Lichens fr B Bettencourt 8/23/04	REL	2033877
8/20/2004	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill Christopher Lichens / Environmental Protection Agency - Region 9	Email: Anticipated schedule for next week's groundwater sampling, w/history	REL	2070524
9/16/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 6/04 sampling - project R04S63, SDG 04168C, 20 water samples analyzed for alkalinity, total organic carbon, ammonia nitrogen, total kjeldahl nitrogen, perchlorate, & total phosphorus, collected 6/15-6/22/04, w/TL	REL	2037715
10/6/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 8/04 split sampling - project R04S81, SDG 04239A, 2 water samples collected 8/27/04, analyzed for 1,4-dioxane, w/TL to C Lichens fr B Bettencourt 10/7/04	REL	2050564
10/13/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 8/04 split sampling - project R04S81, SDG 04239A, 3 water samples collected 8/24 & 8/27/04, analyzed for VOCs, w/TL to C Lichens fr B Bettencourt	REL	2050566
10/14/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 9/04 sampling - project R04S85, SDG 04258B, 14 water samples collected 9/13-9/15/04, analyzed for 1,4-dioxane, w/TL to C Lichens fr B Bettencourt 10/18/04	REL	2050569
10/25/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 9/04 sampling - project R04S85, SDG 04258B, 19 water samples collected 9/13-9/16/04, analyzed for total dissolved solids, w/TL to C Lichens fr B Bettencourt	REL	2050571
10/28/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 8/04 split sampling - project R04S81, SDG 04239A, 3 water samples collected 8/24 & 8/27/04, analyzed for 1,4-dioxane, w/TL to C Lichens fr B Bettencourt 10/28/04 (revised)	REL	2050565
10/29/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 9/04 sampling - project R04S85, SDG 04258B, 19 water samples collected 9/13-9/16/04, analyzed for 1,4-dioxane, w/TL to C Lichens fr B Bettencourt 11/1/04 (revised)	REL	2050570
11/1/2004	Environmental Protection Agency - Region 9		Fact Sheet: EPA evaluates indoor air at site	REL	2045570

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11/4/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 9/04 sampling - project R04S85, SDG 04258B, 19 water samples collected 9/13-9/16/04, analyzed for biochemical oxygen demand, w/TL to C Lichens fr B Bettencourt	REL	2050572
11/4/2004	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 9/04 sampling - project R04S85, SDG 04258B, 19 water samples collected 9/13-9/16/04, analyzed for alkalinity, total organic carbon, total kjeldahl nitrogen, total phosphorus, anions, ammonia nitrate, & perchlorate, w/TL	REL	2050573
1/3/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 12/04 sampling - project R05S18, SDG 04336B, 29 water samples collected 11/30-12/9/04, analyzed for total dissolved solids, w/TL	REL	2056525
1/4/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 12/04 sampling - project R05S18, SDG 04336B, 29 water samples collected 11/30-12/9/04, analyzed for biochemical oxygen demand, w/TL	REL	2056526
1/11/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Draft revised rpt addendum for additional data collection in phase 1A area, part 1, w/TL to C Lichens & others fr S Wallin	REL	2067742
1/12/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Draft revised rpt addendum for additional data collection in phase 1A area, part 2, w/TL to C Lichens & others fr S Wallin	REL	2067743
1/12/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Draft revised rpt addendum for additional data collection in phase 1A area, part 3, w/TL to C Lichens & others fr S Wallin	REL	2067744
1/12/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Draft revised rpt addendum for additional data collection in phase 1A area, part 4, w/TL to C Lichens & others fr S Wallin	REL	2067745
1/12/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Replacement data validation table H-1 - draft revised rpt addendum for additional data collection in phase 1A area, w/TL to C Lichens & T Perina fr S Wallin	REL	2067746
1/12/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Revised replacement data validation table H-1 - draft revised rpt addendum for additional data collection in phase 1A area, w/TL to C Lichens & T Perina fr S Wallin	REL	2067747
1/20/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 12/04 sampling - project R05S18, SDG 04336B, 16 water samples collected 11/30-12/6/04, analyzed for 1,4-dioxane, w/TL	REL	2056527
1/20/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 12/04 sampling - project R05S18, SDG 04336B, 16 water samples collected 11/30-12/6/04, analyzed for alkalinity, total organic carbon, ammonia nitrogen, total kjeldahl nitrogen, perchlorate, total phosphorus, w/TL	REL	2056528
1/20/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 12/04 sampling - project R05S18, SDG 04343A, 14 water samples collected 12/7-12/9/04, analyzed for 1,4-dioxane, w/TL	REL	2056529
1/20/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 12/04 sampling - project R05S18, SDG 04343A, 14 water samples collected 12/7-12/9/04, analyzed for alkalinity, anions, total organic carbon, ammonia nitrogen, total kjeldahl nitrogen, perchlorate, total phosphorus, w/TL	REL	2056530
1/25/2005	David Taylor / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses getting QA plan for EMAX Laboratories	REL	2070525
2/2/2005	Tom Perina / C H 2 M Hill Kerang Sun / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on revised rpt addendum for additional data collection in phase 1A area, w/TL	REL	2067748
2/3/2005	John Eisenbeis / Camp Dresser & McKee, Inc Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Preliminary evaluation of soil gas results fr 11/04, w/attchs & TL to C Lichens fr C McLaughlin	REL	2067749
2/10/2005	Mike Grigorieff / C H 2 M Hill Tom Perina / C H 2 M Hill Richard Braun / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on preliminary evaluation of soil gas results fr 11/04, w/TL to T Perina fr C Lichens 2/14/05	REL	2067750

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2/16/2005	Sharon Wallin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill	Email: Discusses groundwater sampling schedule for next week, w/history	REL	2070526
2/24/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Reduced analyte list for OU 2 sampling	REL	2070527
3/9/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Pre-Final revised rpt addendum for additional data collection in phase 1A area, w/TL C Lichens fr S Wallin	REL	2067751
3/11/2005	Christopher Lichens / Environmental Protection Agency - Region 9	Lori Parnass / CA Environmental Protection Agency - Dept of Toxic Substances Control	Ltr: Request for proposed state ARARs for OU1 interim groundwater action	REL	2067752
3/11/2005	Omega Chemical Site P R P Organized Group	Environmental Protection Agency - Region 9	Preliminary draft EE/CA annotated outline, w/TL to C Lichens fr C McLaughlin	REL	2067753
3/14/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Comments on revised rpt addendum for additional data collection in phase 1A area dated 3/9/05	REL	2067754
3/14/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on revised rpt addendum for additional data collection in phase 1A area, w/TL	REL	2067756
3/14/2005	Elizabeth Cox / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	(Privileged - FOIA ex 5) Email: Discusses community relations requirements for EE/CA administrative record, w/attach & history (Privileged document target only)	DAC	2071785
3/17/2005	Tom Perina / C H 2 M Hill Richard Braun / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on preliminary draft EE/CA annotated outline, w/TL	REL	2067757
3/18/2005	Christopher Lichens / Environmental Protection Agency - Region 9	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Ltr: Comments on preliminary draft EE/CA annotated outline	REL	2067758
3/21/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Need to fix pump in well MW11	REL	2070528
3/23/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 2/05 split sampling project R05S35, SDG 05055B, 3 water samples collected 2/23/05, analyzed for 1,4-dioxane, w/TL to C Lichens fr B Bettencourt	REL	2063464
3/25/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 1 2/05 split sampling project R05S35, SDG 05055B, 3 water samples collected 2/23/05, analyzed for VOCs, w/TL to C Lichens fr B Bettencourt	REL	2063465
3/25/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Pump in well MW11 is fixed	REL	2070529
3/30/2005	Camp Dresser & McKee, Inc	Environmental Protection Agency - Region 9	Revised rpt addendum for additional data collection in phase 1A area, w/TL to C Lichens fr S Wallin 3/31/05, w/o compact disc	REL	2063469
4/5/2005	Environmental Protection Agency - Region 9	Environmental Protection Agency - Region 9	Analytical testing results for OU 2 3/05 sampling - project R05S37, SDG 05060A, 18 water samples collected 2/28-3/3/05, analyzed for 1,4-dioxane, w/TL to C Lichens fr B Bettencourt 4/7/05	REL	2063463
4/8/2005	David Chamberlin / Camp Dresser & McKee, Inc	Chuck McLaughlin / Omega Chemical Site P R P Organized Group Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses status of EE/CA revised outline & RA objectives, w/history	REL	2067759
4/8/2005	David Chamberlin / Camp Dresser & McKee, Inc Sharon Wallin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: On-site soils RI/FS workplan addendum #2 - scope of work for additional investigation, w/figures 1-24, w/o app A, w/TL	REL	2067760
4/11/2005	CA Environmental Protection Agency - Dept of Toxic Substances Control	Environmental Protection Agency - Region 9	Draft list of ARARs for treatment of VOCs in soil & groundwater media, w/TL to C Lichens fr L Parnass	REL	2068641
4/12/2005	David Chamberlin / Camp Dresser & McKee, Inc	Tom Perina / C H 2 M Hill Christopher Lichens / Environmental Protection Agency - Region 9	Email: Proposes RA objectives for inclusion in EE/CA rpt	REL	2068642

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4/14/2005	David Chamberlin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9 Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Email: Discusses preliminary ARARs for EE/CA rpt, w/history	REL	2068643
4/15/2005	David Chamberlin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses EE/CA RA objectives, w/history	REL	2068644
4/15/2005	Mike Grigorieff / C H 2 M Hill Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on on-site soils RI/FS workplan addendum #2 scope of work for additional investigation, w/TL	REL	2068704
4/18/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Suggested revisions to EPA comments re on-site soils workplan addendum #2, w/attach	REL	2068705
4/18/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Comments on on-site soils workplan addendum #2	REL	2068706
4/18/2005	Christopher Lichens / Environmental Protection Agency - Region 9	Elizabeth Cox / Environmental Protection Agency - Region 9	(Privileged - FOIA ex 5) Email: Would like to discuss including mass removal as objective in EE/CA, w/history & forward (Privileged document target only)	DAC	2071786
4/29/2005	Camp Dresser & McKee, Inc	Omega Chemical Site P R P Organized Group	Draft EE/CA, w/apps A-E & TL to C Lichens fr S Wallin	REL	2067734
4/29/2005	Sharon Wallin / Camp Dresser & McKee, Inc David Chamberlin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Response to EPA comments re on-site soils RI/FS workplan addendum #2, w/TL	REL	2068708
5/6/2005	Alice Campbell / CA Environmental Protection Agency - Dept of Toxic Substances Control	Lori Parnass / CA Environmental Protection Agency - Dept of Toxic Substances Control	Memo: Comments on draft EE/CA	REL	2068714
5/9/2005	John Eisenbeis / Camp Dresser & McKee, Inc David Chamberlin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Response to comments on sub slab depressurization (SSD) workplan, w/TL to S Wallin fr C Lichens	REL	2068709
5/9/2005	Tom Perina / C H 2 M Hill Mike Grigorieff / C H 2 M Hill Richard Braun / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on draft EE/CA, w/attach & TL to C Lichens fr M Grigorieff 5/10/05	REL	2068710
5/10/2005	Stan Smucker / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Review comments on appendix B of draft EE/CA	REL	2068711
5/11/2005	Lori Parnass / CA Environmental Protection Agency - Dept of Toxic Substances Control	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Review comments on draft EE/CA	REL	2068712
5/11/2005	Lori Parnass / CA Environmental Protection Agency - Dept of Toxic Substances Control	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Review comments on draft EE/CA, w/o attach	REL	2068713
5/11/2005	Richard Braun / C H 2 M Hill Mike Grigorieff / C H 2 M Hill Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on draft EE/CA, w/attach & TL	REL	2068715
5/12/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Review comments on section B2 of draft EE/CA	REL	2068716
5/13/2005	Stan Smucker / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Comments on site conceptual model	REL	2068717
5/16/2005	Stan Smucker / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Comments on draft EE/CA	REL	2068718
5/16/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review of DTSC comments on draft EE/CA, w/TL	REL	2068719
5/19/2005	Elizabeth Cox / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Draft comments on draft EE/CA, w/TL	REL	2068720
5/20/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Makes changes to EE/CA comment ltr, w/attach & history	REL	2069681

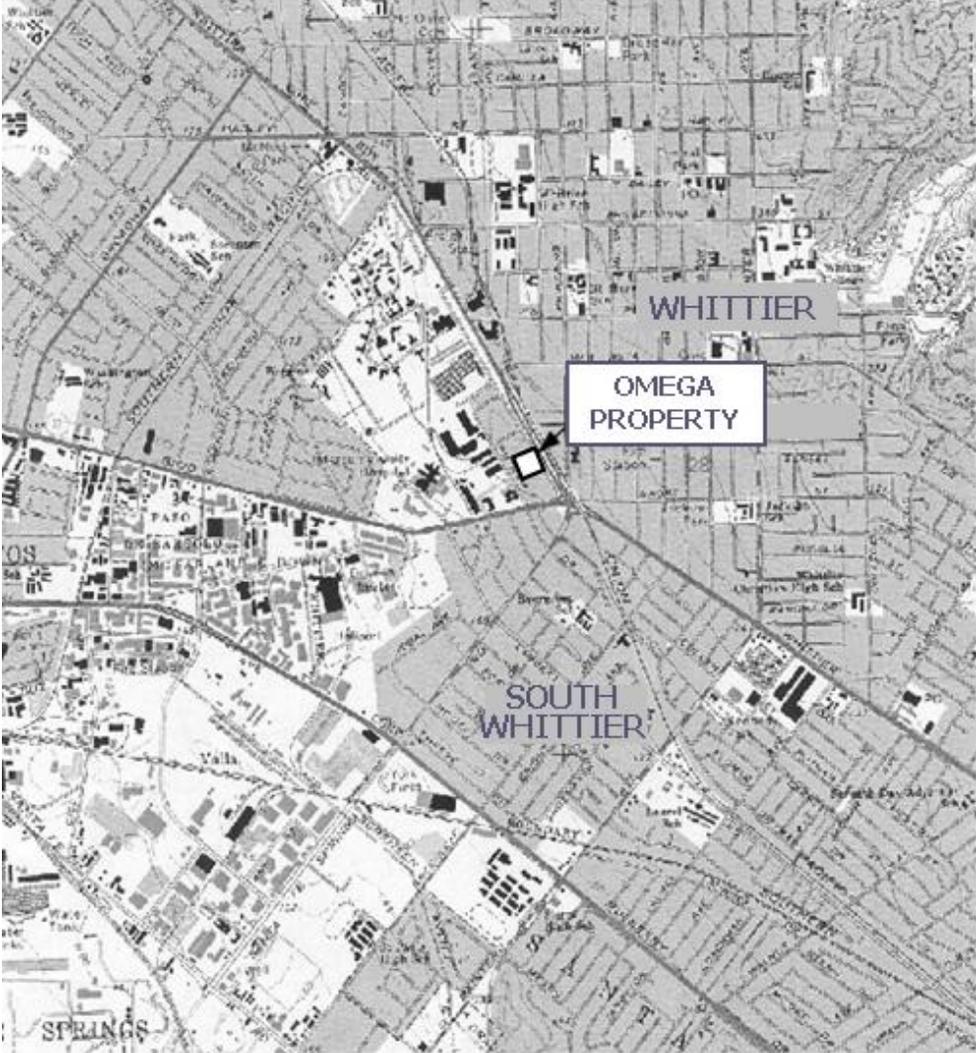
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5/20/2005	Elizabeth Cox / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Comments on EE/CA comment ltr, w/attach & history	REL	2069682
5/20/2005	Elizabeth Cox / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Comments on EE/CA comment ltr	REL	2069683
5/20/2005	Elizabeth Cox / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Comments on EE/CA comment ltr	REL	2069684
5/27/2005	Tom Perina / C H 2 M Hill Mike Grigorieff / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on response to comments on Omega SSD (sub slab depressurization) testing workplan (draft), w/TL to C Lichens fr T Perina 5/31/05	REL	2069686
5/29/2005	Tom Perina / C H 2 M Hill Mike Grigorieff / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on response to EPA comments on on-site soils RI/FS workplan addendum #2 scope of work for additional investigation (draft), w/TL to C Lichens fr T Perina 5/31/05	REL	2069685
5/31/2005	Alice Campbell / CA Environmental Protection Agency - Dept of Toxic Substances Control	Lori Parnass / CA Environmental Protection Agency - Dept of Toxic Substances Control	Memo: Revised on-site soils workplan addendum #2, phase 1A area, w/TL to L Parnass & C Lichens fr A Campbell 6/2/05	REL	2069687
6/1/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses off-property sampling rationale	REL	2069688
6/6/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Review of DTSC comments on revised on-site soils workplan addendum #2, phase 1A area	REL	2069689
6/6/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses DTSC's comments re on-site soils RI/FS workplan addendum #2, w/history	REL	2069690
6/7/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Responds to question re statement about decision errors under step 6, w/history	REL	2069691
6/10/2005	Tom Perina / C H 2 M Hill	David Chamberlin / Camp Dresser & McKee, Inc	Email: Reference for USGS rpt	REL	2069692
6/16/2005	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Christopher Lichens / Environmental Protection Agency - Region 9 Tom Perina / C H 2 M Hill	Criteria for evaluating new data (preliminary draft), w/TL	REL	2069693
6/21/2005	Tom Perina / C H 2 M Hill Mike Grigorieff / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Memo: Review comments on preliminary draft criteria for evaluating new data, w/TL	REL	2069694
6/23/2005	David Chamberlin / Camp Dresser & McKee, Inc	Christopher Lichens / Environmental Protection Agency - Region 9 Tom Perina / C H 2 M Hill	Email: Alternatives to be included in revised EE/CA rpt & logistics for completing rpt	REL	2069695
6/23/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses EE/CA alternatives & logistics, w/history	REL	2069696
6/23/2005	Frederick Schauffler / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses EE/CA alternatives & logistics	REL	2069697
6/27/2005	Tom Perina / C H 2 M Hill	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Comments on EE/CA summary of alternatives & possible expansion, w/attach & history	REL	2069698
6/27/2005	Frederick Schauffler / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Suggestions for EE/CA summary, w/attach	REL	2069700
6/27/2005	Frederick Schauffler / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Suggestions for EE/CA summary with re-formatted table, w/attach	REL	2069701
6/27/2005	Elizabeth Cox / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	(Privileged - FOIA ex 5) Email: Discusses EE/CA alternatives & logistics, w/history (Privileged document target only)	DAC	2071787
6/28/2005	Frederick Schauffler / Environmental Protection Agency - Region 9	Christopher Lichens / Environmental Protection Agency - Region 9	Email: Updated suggestions for EE/CA summary, w/attach	REL	2069702

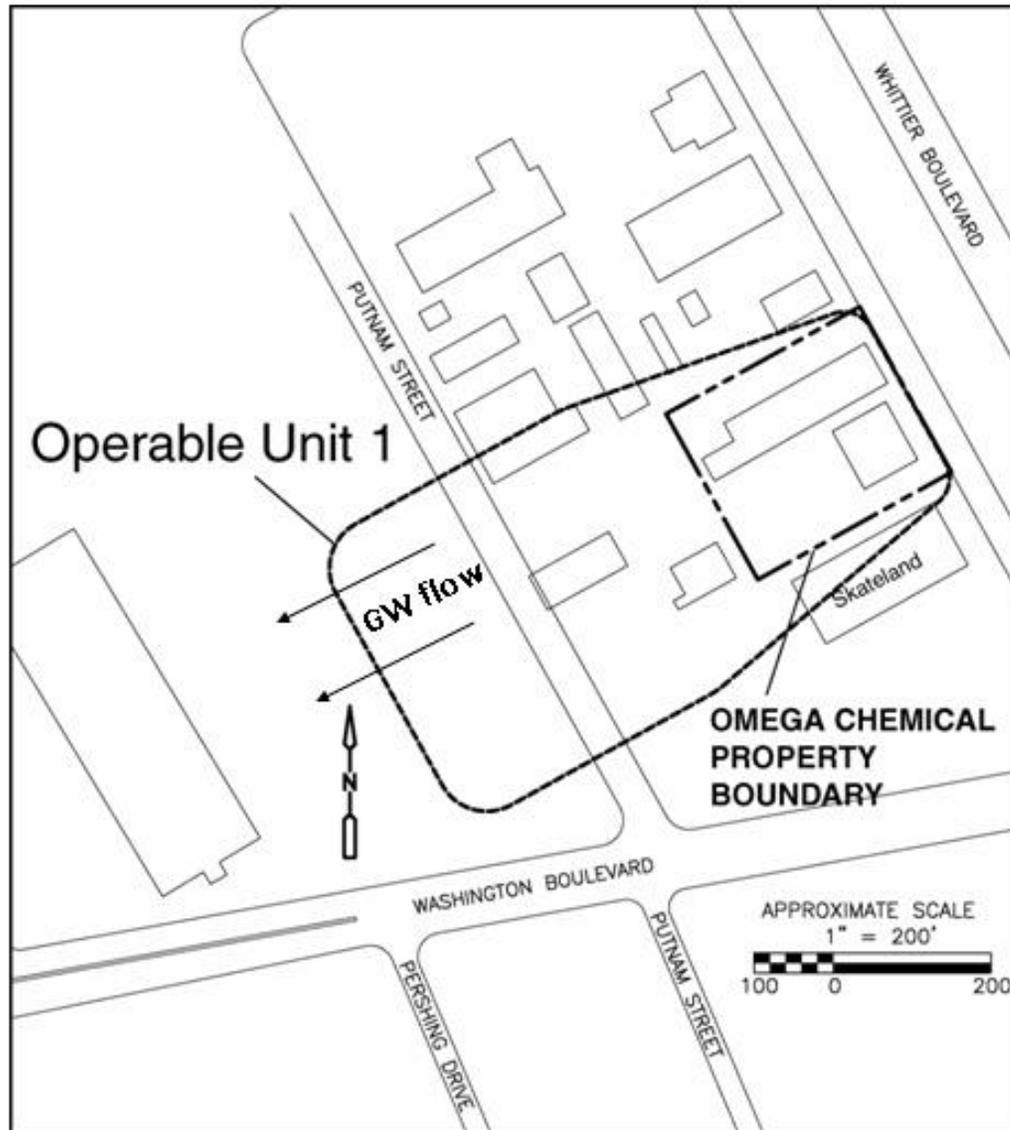
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7/8/2005	David Chamberlin / Camp Dresser & McKee, Inc	Chuck McLaughlin / Omega Chemical Site P R P Organized Group Christopher Lichens / Environmental Protection Agency - Region 9	Email: Discusses EE/CA alternative 2 for treated water, w/history	REL	2070530
7/18/2005	Camp Dresser & McKee, Inc	Omega Chemical Site P R P Organized Group	Draft EE/CA, w/EPA revisions & comments, w/o figures & w/o apps A & C-E	REL	2071765
7/22/2005	Christopher Lichens / Environmental Protection Agency - Region 9	Chuck McLaughlin / Omega Chemical Site P R P Organized Group	Ltr: Draft EE/CA dated 7/18/05 is conditionally approved, w/figures 1 & 2	REL	2071764
7/26/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpts: Case R04S42, SDG 04063B, 19 water samples for chemical oxygen demand, collected 3/2-3/5/04	REL	2070551
7/26/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpts: Case R04S42, SDG 04063B, 22 water samples for N-Nitrosodimethylamine, collected 3/2-3/5/04	REL	2070552
7/26/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpts: Case R04S42, SDG 04063B, 22 water samples for hexavalent chromium, collected 3/2-3/5/04	REL	2070553
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpt: Project R04S77, SDG 04216A, 8 air samples for volatiles, collected 7/30 & 7/31/04	REL	2070555
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpts: Project R04S33, SDG 04021B, 1 water & 4 soil samples for volatiles & semivolatiles, collected 1/20 & 1/21/04	REL	2070556
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpt: Project R04S52, SDG 04105B, 3 air samples for volatiles, collected 4/12 & 4/13/04	REL	2070557
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpts: Project R04S41, SDG 04057E, 4 water samples for volatiles & semivolatiles, collected 2/24-2/25/04	REL	2070558
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpt: Project R04S81, SDG 04239A, 3 water samples for volatiles, collected 8/24 & 8/27/04	REL	2070559
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpt: Project R05S17, SDG 04320A, 10 air samples for volatiles, collected 11/11/04	REL	2070560
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpt: Project R05S21, SDG 05004E, 4 air samples for volatiles, collected 12/29/04	REL	2071761
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpt: Project R05S21, SDG 05015B, 4 air samples for volatiles, collected 1/12/05	REL	2071762
7/27/2005	C H 2 M Hill	Environmental Protection Agency - Region 9	Data Validation Rpts: Project R05S35, SDG 05055B, 3 water samples for volatiles & semivolatiles, collected 2/23/05	REL	2071763
7/29/2005	Camp Dresser & McKee, Inc	Omega Chemical Site P R P Organized Group	EE/CA, w/apps A-E & TL to C Lichens fr S Wallin	REL	2071781
8/1/2005	Environmental Protection Agency - Region 9		Fact Sheet: Proposed plan for interim groundwater action	REL	2071782
8/5/2005	Environmental Protection Agency		List of US EPA guidance documents consulted during development & selection of response action for site	REL	2070540
8/22/2005	Ann Bonnette-Smith / Huntington Court Reporters & Transcription, Inc		Transcript of proceedings - proposed plan public meeting, w/o computer disk	REL	2077205
8/23/2005	Thomas Evins / Tregen Corp	Christopher Lichens / Environmental Protection Agency - Region 9	Ltr: Public comments re proposed plan for interim groundwater action	REL	2077206
9/2/2005	Christopher Lichens / Environmental Protection Agency - Region 9	Thomas Evins / Tregen Corp	Ltr: Response to public comments re proposed plan for interim groundwater action	REL	2077207
9/27/2005	Christopher Lichens / Environmental Protection Agency - Region 9	Elizabeth Adams / Environmental Protection Agency - Region 9	Action Memo: Non-time-critical removal action	REL	2077208

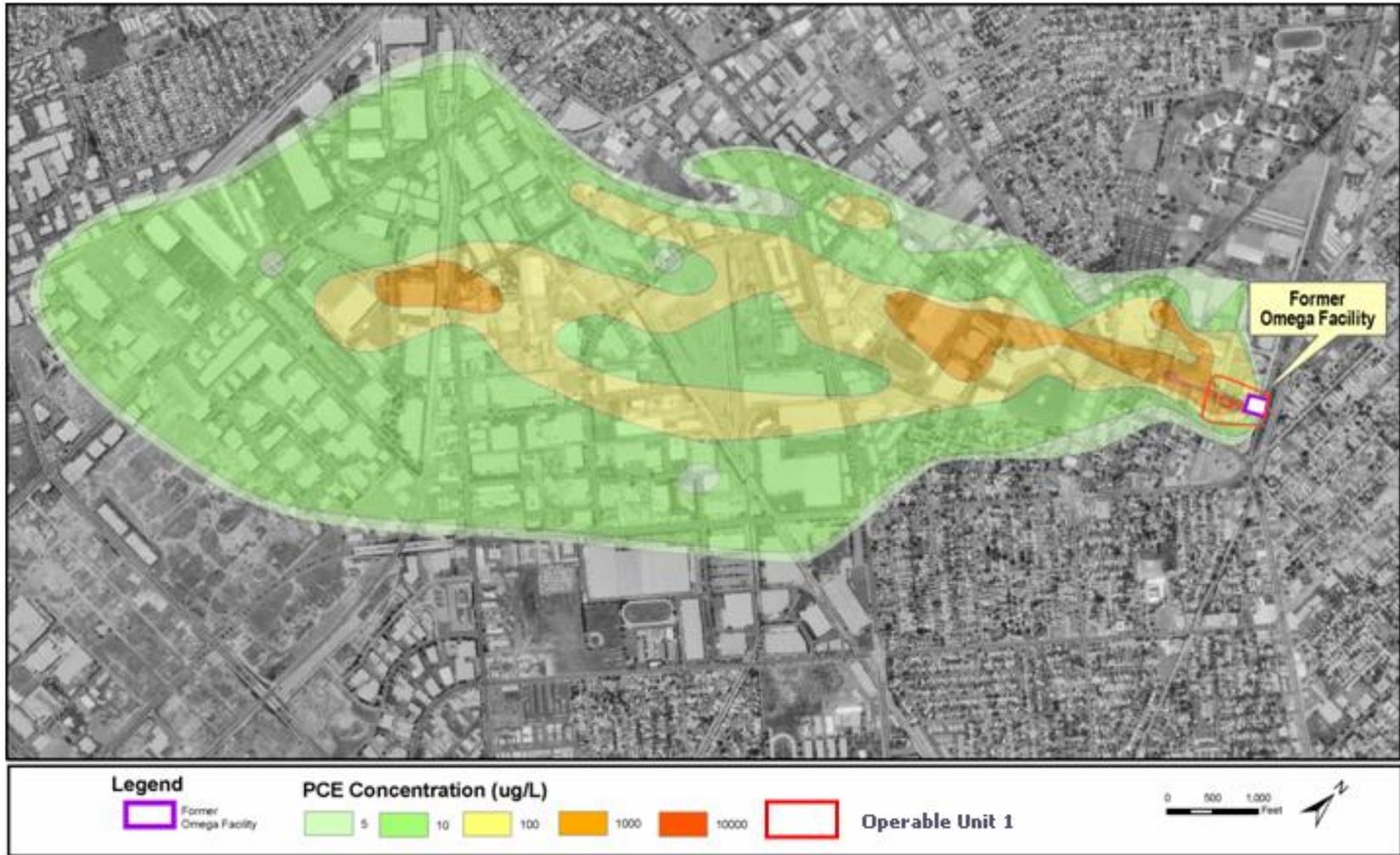
Figures



**Figure 1:
Property Location**



**Figure 2:
Operable Unit 1**



**PCE Concentrations
2003**

**Figure 3:
Operable Unit Two**