Response to Public Comments received from Caltrans on August 26, 2015
Regarding the Closure Recommendation for Hilltop Gas,
Located at 722 East Cypress Avenue, Redding
Claim 18650

A comment letter dated August 26, 2015, prepared by Mr. Arron Rambach, Caltrans, was submitted to the State Water Board. A summary of the case is presented first, followed by the Caltrans comments and the response of State Water Board staff.

Summary

Hilltop Valero is an operating petroleum fueling facility located at 722 E. Cypress Avenue, Redding California. The site, also known as Hilltop Gas, has been a gas station since approximately 1960. From approximately 1960 to 1988 the site was a Regal Gas station owned by Wickland Oil; from 1988 to 1995 Exxon Oil Company owned and operated an Exxon station at the site; from 1995 to 2003 Nella Oil Company owned the site, and from 2003 to the present the site has been owned by DJS Partners, and operated as Hilltop Valero. The Former Texaco station, located east of Hilltop Valero at 800 E. Cypress Avenue operated as a gas station from at least 1983 until 1992, and was owned by Chevron. Since 1996 a Jack in the Box has operated at the site.

For clarity, in this response, the "Former Exxon Station" refers to the gas station that operated at 722 E. Cypress Avenue prior to Hilltop Valero, and the "Former Texaco Station" refers to the gas station that operated at 800 E. Cypress Avenue prior to site redevelopment as a Jack in The Box restaurant. See State Water Board staff modified figure at end of this document.

Both the Former Exxon Station and Former Texaco Station had claims with the Underground Storage Tank (UST) Cleanup Fund. The Former Exxon Station UST case was closed in August 1997, and the Former Texaco Station UST case was closed in December 1996. According to the Central Valley Regional Water Quality Control Board (CVRWQCB) staff, elevated residual petroleum hydrocarbons were present in groundwater at both sites when they were closed[1].

In April 2004, SBC (now AT&T) reported to the CVRWQCB that petroleum-impacted water had been observed in manholes (MH) #78, 79, 80, 112 and 113 located in a communications conduit on the north side of E. Cypress Avenue in the vicinity of the Former Exxon and Texaco stations. Water samples collected from inside the manholes between March and December 2003 indicated the presence of total petroleum hydrocarbons as gasoline (TPHg), diesel (TPHd), benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE). In addition, a soil sample collected from inside MH#79 during clean out indicated TPHg concentration of 21 parts per million (ppm), a total lead concentration of 230 ppm, and soluble lead of 5.5 ppm. The water sample collected from MH#79 indicated a TPHg concentration of 3,600 micrograms per liter (µg/L), benzene concentration of 140 µg/L, MTBE concentration of 130 µg/L, and total lead concentration of 8.2. µg/L. The documentation stated that MH#79 had been abandoned in 1984 due to constant infiltration of petroleum-impacted water. Reportedly, due to the presence of the petroleum-impacted water, ongoing remediation was required to allow worker entry.

In October 2006, as part of Hilltop Valero investigation activities, 14 soil borings (GP-1 through

[1] CVRWQCB, July 16, 2007, Order To Submit Information Pursuant to California Water Code Section 13267, Former Texaco Station, 800 E. Cypress Avenue, and Former Exxon Station, 722 E. Cypress Avenue, Redding, California, Shasta County.

GP-14) were advanced at Hilltop Valero and offsite in the vicinity of MH#79 to evaluate the potential source of petroleum hydrocarbons in the vicinity of MH#79. Results of analyses indicated the highest concentrations in soil and groundwater was on the east side of the property, upgradient of the USTs and dispensers. Soil samples from offsite borings GP-13 and GP-14, located closest to MH#79 indicated no detectable petroleum hydrocarbons. The groundwater sample collected from GP-14 indicated a TPHg concentration of 2,000 ug/L, and minor BTEX concentrations; the groundwater sample from GP-13 indicated no detectable petroleum hydrocarbons.

On July 16, 2007, the CVRWQCB reopened both UST cases as a result of the 2004 complaint by SBC[2].

The Former Texaco station was east of, and hydraulically upgradient of the former Exxon Station, and several assessment and monitoring reports for the former Texaco Station documented that free product had migrated west from the former Texaco Station to two wells at the former Exxon Station. In August 2008, as part of former Texaco Station activities three soil borings were advanced on the west side of the former Texaco Station. Results of analyses indicated no detectable petroleum hydrocarbon concentrations, with the exception of TPHg in one soil and one groundwater sample.

In February 2012, as part of Hilltop Valero investigation activities, five shallow soil samples (SL-1 through SL-5) were collected along the top of the vaults in the AT&T communications conduit. Results of analyses indicated detectable TPHg and TPHd concentrations in one sample collected near the Hilltop Valero driveway, and in one sample collected from the island adjacent to the I-5 freeway northbound onramp.

Between May 2003 and March 2013 SBC (now AT&T) collected several water samples from MH#78, 79, 80, 112 and 113. Results of analyses consistently indicated detectable petroleum hydrocarbons in MH#78, #79 and no detectable concentrations in MH#80.

Key excerpts from the Caltrans letter are presented below in italics. Attachments referenced in the Caltrans letter are not included. State Water Board staff has numbered and underlined specific text to guide the reader to the relevant State Water Board staff response:

During widening of the northbound East Cypress Avenue bridge on Interstate 5 in 2011, Caltrans' highway and bridge construction contractors encountered (1) previously unknown soil and groundwater contamination. During pile foundation excavation, gasoline-contaminated soil and groundwater was discovered. Caltrans paid its contractors $66,000 in contract change orders in order to mitigate and remove contamination during bridge construction. Please refer to the enclosures (six total pages) documenting these contract change order costs. (2) Caltrans is considering its legal options to recover costs related to the contamination.

Response 1: Soil and groundwater contamination in and near the Caltrans right of way (ROW) was first documented in 2003 by SBC (now AT&T). Several site investigations associated with former Exxon SS#7-0102 and Hilltop Valero, (both located at 722 E. Cypress Avenue) and

[2] CVRWQCB, July 16, 2007, Order To Submit Information Pursuant to California Water Code Section 13267, Former Texaco Station, 800 E. Cypress Avenue, and Former Exxon Station, 722 E. Cypress Avenue, Redding, California, Shasta County.

former Texaco SS#21-1186, formerly located at 800 E. Cypress Avenue, have been performed to determine the source of the petroleum hydrocarbons in soil in the vicinity of the Caltrans ROW and SBC manhole (MH) #79 or in the water inside manholes #78, 79 and 80 located in the communication conduit along E. Cypress Avenue (see attached map).

Response 2: The State Water Board staff has reviewed the historic and current data associated with the SBC/AT&T manholes, the former Texaco Station, the Former Exxon Station and current Hilltop Valero. The responsible party for Hilltop Gas has performed two assessments to identify a link between the petroleum hydrocarbons in the vicinity of MH#79 and the Caltrans ROW and the USTs at the Former Exxon Station/current Hilltop Valero. No link has been conclusively identified. The State Water Board staff acknowledges that contamination is present in the identified location; however the data does not show that Hilltop Valero is the sole or primary source of the petroleum hydrocarbons in soil in the vicinity of the Caltrans ROW, MH#79 or in the water inside manholes #78, 79 and 80. There are several potentially responsible parties including, but not limited to:

- Wickland Oil (722 E. Cypress Avenue, 1960 to 1988)
- Exxon-Mobil Oil Company (Former Exxon Station, 722 E. Cypress Avenue, 1988 to 1995)
- Nella Oil Company (722 E. Cypress Avenue, 1995 to 2003)
- DJS Partners LLC (Hilltop Valero, 722 E. Cypress Avenue, 2003 to present)
- Union Oil Company Unocal SS #5967, 755 E. Cypress Avenue
- Chevron Products Company (Chevron SS#9-2562, 765 E. Cypress Avenue)
- Chevron Products Company (Former Texaco Station, 800 E. Cypress Avenue approximately 1983 to 1992)
- Kobra Restaurant Properties (Jack In The Box, 800 E. Cypress Avenue)
- Shasta Siskiyou Transport (Hilltop Union 76, 2604 Hilltop Drive)
- Parties responsible for unauthorized releases

The contamination discovered during bridge construction is hydraulically downgradient of the Hilltop Gas source of contamination (USTs and former USTs). Please refer to the enclosed aerial photograph to locate the bridge site contamination in relation to Hilltop Gas. (3)There are no known or likely other sources of contamination within the State of California right-of-way or near the bridge construction zone. (4) Additional soil and groundwater contamination is likely to be present within State of California right-of-way, but the Hilltop Gas responsible party has not investigated in this vicinity. Caltrans and its contractors are likely to encounter contamination and incur additional mitigation costs in the event of future subsurface highway construction, utility, or related work.

Response 3: There are several likely sources for the contamination in the Caltrans ROW, at the base of a highway overpass near a major commercial thoroughfare:

- Several gas stations were/are hydraulically upgradient of the Caltrans ROW and MH#79: Hilltop Valero, Hilltop Union 76, Chevron SS#9-2562, and the Former Exxon Station, Former Texaco Station, and Former Unocal SS #5967. Any of these sites could have potentially contributed to the petroleum hydrocarbons observed in the Caltrans ROW and MH#79.

- The California Office of Emergency Services (OES) tracks reported spills of petroleum hydrocarbons. The OES database shows that the majority of petroleum hydrocarbon

releases on freeways or major roads are the result of accidents that cause saddle tank ruptures in big rigs. One such incident was reported as recently as May 4, 2014 on southbound I-5 Freeway at the Cypress Avenue exit. The incident report indicated that 15 to 20 gallons of diesel were released. The contaminated soil found in the Caltrans ROW and vicinity of MH#79 could be the result of a reported or unreported unauthorized release caused by a traffic accident on the freeway, the freeway onramp, or Cypress Avenue.

- The footing of the Caltrans bridge and MH#79 are immediately adjacent to a storm drain and a ditch engineered to funnel runoff into the storm drain. It is highly probable that storm water runoff containing gasoline and diesel has saturated the soil in that area and has entered and continues to enter MH#79.

- The soil and groundwater data collected at MH#79 in 2003 reported elevated total lead concentrations which are consistent with storm water runoff in areas with high vehicle gasoline and diesel particulate emissions, such as a freeway or major road.

- Site assessment and groundwater monitoring results for the Former Exxon Station and current Hilltop Valero demonstrated that the contamination beneath Hilltop Valero is limited to onsite.

- Prior to remediation the contamination originating from the Former Texaco Station was documented to extend far onto the Former Exxon Station. The contamination at the Former Texaco Station was significantly greater in degree and extent than the contamination at the Former Exxon Station and current Hilltop Gas.

- As stated in the 2007 CVRWQCB letter the relative concentrations of petroleum hydrocarbon constituents in groundwater beneath Hilltop Valero indicate an older release. Additional analyses of the data for the manhole water samples collected between 2003 and 2013 indicate younger releases. Therefore, Hilltop Valero cannot be the sole or primary source of the contamination observed in the manhole water.

- There is no evidence of vegetative stress for the bushes at the west boundary of Hilltop Valero. If contaminated groundwater were flowing offsite toward the Caltrans ROW and MH#79, the root systems of those plants would be affected.

Response 4: The responsible party for Hilltop Gas has performed two assessments to identify a link between the petroleum hydrocarbons in the vicinity of MH#79 and the Caltrans ROW and the USTs at the Former Exxon Station/current Hilltop Valero. No link has been conclusively identified. The combined data obtained to date indicate that Hilltop Gas is not the source of contamination in the area of the Caltrans right of way or the AT&T communications conduit. Therefore, if additional investigation is required for that area, it should not be the financial responsibility of the Responsible Party for Hilltop Gas or funded by the Underground Storage Tank Cleanup Fund.

In addition to the soil and groundwater contamination discovered at the bridge construction zone in 2011, (5) the SWRCB's UST Case Closure Review Summary Report does not mention and fails to consider soil and groundwater contamination along the AT&T utility trench and in vault 79 within State of California right-of-way between the northbound onramp and Interstate 5. Please refer to the enclosed aerial photograph to

locate AT&T's utility vault 79 in relation to Hilltop Gas. AT&T reportedly continues to incur costs associated with mitigating the contamination that is likely sourced from Hilltop Gas.

Response 5: The Review Summary Report (RSR) was prepared for the Hilltop Valero site. The RSR specifically addresses the activities performed to assess and remediate petroleum hydrocarbon contamination from one or more USTs, and whether the site meets the criteria of the Low Threat Closure Policy. The contamination in the communications conduit ("AT&T utility trench") and MH#79 cannot be conclusively attributed to the Hilltop Valero USTs.

Caltrans is concerned that, in the event of future subsurface construction or work, the Department will incur costs to mitigate soil and groundwater contamination as a result of contamination originating from the Hilltop Gas, particularly if the case is closed by the SWRCB. (6) Please let Caltrans know the SWRCB's rationale for closing Hilltop Gas without consideration of contamination on State of California right-of-way.

Response 6: The State Water Board staff recommends closure for the Hilltop Valero site because it meets the criteria of the Low Threat Closure Policy and thus has been determined to not pose a risk human health or the environment. Two site assessments were performed to identify a link between the petroleum hydrocarbons in the vicinity of MH#79 and the Caltrans ROW and the USTs at the Former Exxon Station/current Hilltop Valero. No link has been conclusively identified. The combined data obtained to date indicate that Hilltop Gas is not the source of contamination in the area of the Caltrans right of way or the AT&T communications conduit. Therefore, if additional investigation is required for that area, it should not be the financial responsibility of the Responsible Party for Hilltop Gas or funded by the Underground Storage Tank Cleanup Fund.

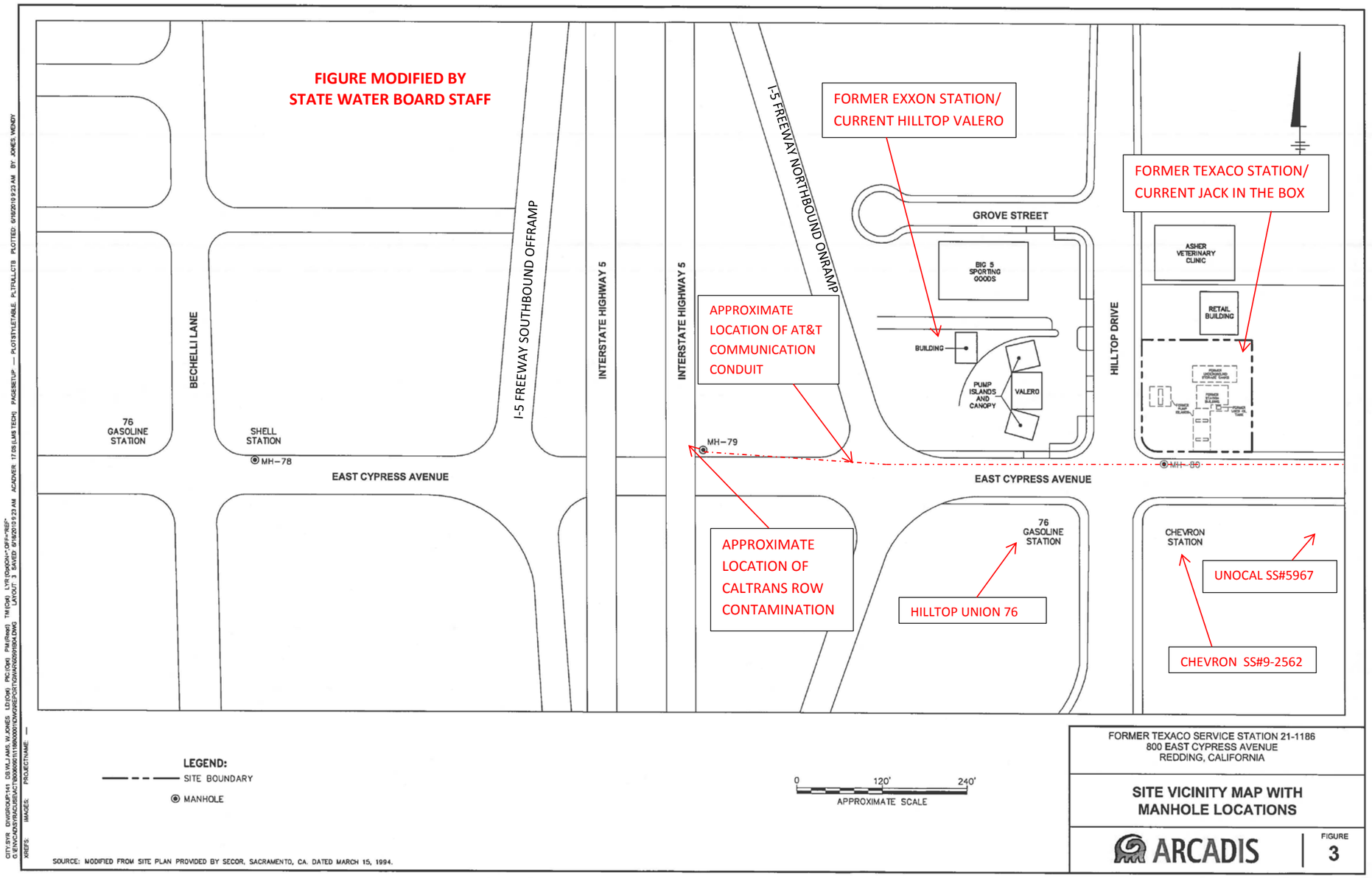
FIGURE MODIFIED BY
STATE WATER BOARD STAFF
FORMER EXXON STATION/
CURRENT HILLTOP VALERO
FORMER TEXACO STATION/
CURRENT JACK IN THE BOX
APPROXIMATE
LOCATION OF AT&T
COMMUNICATION
CONDUIT
APPROXIMATE
LOCATION OF
CALTRANS ROW
CONTAMINATION
HILLTOP UNION 76
UNOCAL SS#5967
CHEVRON SS#9-2562
BECHELLI LANE
I-5 FREEWAY SOUTHBOUND OFFRAMP
INTERSTATE HIGHWAY 5
I-5 FREEWAY NORTHBOUND ONRAMP
HILL TOP DRIVE
GROVE STREET
EAST CYPRESS AVENUE
76 GASOLINE STATION
SHELL STATION
CHEVRON STATION
ASHER VETERINARY CLINIC
RETAIL BUILDING
BIG 5 SPORTING GOODS
BUILDING
PUMP ISLANDS AND CANOPY
VALERO
MH-78
MH-79
MH-80
LEGEND:
SITE BOUNDARY
MANHOLE
0 120' 240'
APPROXIMATE SCALE
SOURCE: MODIFIED FROM SITE PLAN PROVIDED BY SECOR, SACRAMENTO, CA. DATED MARCH 15, 1994.
FORMER TEXACO SERVICE STATION 21-1186
800 EAST CYPRESS AVENUE
REDDING, CALIFORNIA
SITE VICINITY MAP WITH
MANHOLE LOCATIONS
ARCADIS
FIGURE
3