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6/27/14

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WQ 2013-0117-UST

In the Matter of Underground Storage Tank Case Closure Pursuant to Health and Safety Code Section 25296.40 and the Low-Threat Underground Storage Tank Case Closure Policy

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BY THE EXECUTIVE DIRECTOR:[1]

By this order, the Executive Director directs closure of the underground storage tank (UST) case at the site listed below, pursuant to subdivision (a) of section 25296.40 of the Health and Safety Code.[2] The name of the petitioner, the site name, the site address, the Underground Storage Tank Cleanup Fund (Fund) claim number if applicable, the lead agency, and case number are as follows:

Tom Kearney, Caster Companies, Inc.
Spartan Gas
1415 Oakland Road, San Jose, Santa Clara County, CA
Fund Claim No. 2333
County of Santa Clara Department of Environmental Health, Case No. 06S1E32D01f

I. STATUTORY AND PROCEDURAL BACKGROUND

Upon receipt of a petition from a UST owner, operator, or other responsible party, section 25296.40 authorizes the State Water Resources Control Board (State Water Board) to close or require closure of a UST case where an unauthorized release has occurred, if the State Water Board determines that corrective action at the site is in compliance with all of the requirements of subdivisions (a) and (b) of section 25296.10. The State Water Board, or in certain cases the State Water Board Executive Director, may close a case or require the closure

[1] State Water Board Resolution No. 2012-0061 delegates to the Executive Director the authority to close or require the closure of any UST case if the case meets the criteria found in the State Water Board's Low-Threat Underground Storage Tank Case Closure Policy adopted by State Water Board Resolution No. 2012-0016.

[2] Unless otherwise noted, all references are to the California Health and Safety Code.

of a UST case. Closure of a UST case is appropriate where the corrective action ensures the protection of human health, safety, and the environment and where the corrective action is consistent with: 1) Chapter 6.7 of division 20 of the Health and Safety Code and implementing regulations; 2) Any applicable waste discharge requirements or other orders issued pursuant to division 7 of the Water Code; 3) All applicable state policies for water quality control; and 4) All applicable water quality control plans.

State Water Board staff has completed a review of the UST case identified above, and recommends that this case be closed. The recommendation is based upon the facts and circumstances of this particular UST case. A UST Case Closure Summary has been prepared for the case identified above and the basis for determining compliance with the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closures (Low-Threat Closure Policy or Policy) are explained in the Case Closure Summary.

Low-Threat Closure Policy

In State Water Board Resolution No. 2012-0016, the State Water Board adopted the Low-Threat Closure Policy. The Policy became effective on August 17, 2012. The Policy establishes consistent statewide case closure criteria for certain low-threat petroleum UST sites. In the absence of unique attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents, cases that meet the general and media-specific criteria in the Low-Threat Closure Policy pose a low-threat to human health, safety, and the environment and are appropriate for closure under Health and Safety Code section 25296.10. The Policy provides that if a regulatory agency determines that a case meets the general and media-specific criteria of the Policy, then the regulatory agency shall notify responsible parties and other specified interested persons that the case is eligible for case closure. Unless the regulatory agency revises its determination based on comments received on the proposed case closure, the Policy provides that the agency shall issue a uniform closure letter as specified in Health and Safety Code section 25296.10. The uniform closure letter may only be issued after the expiration of the 60-day comment period, proper destruction or maintenance of monitoring wells or borings, and removal of waste associated with investigation and remediation of the site.

Health and Safety Code section 25299.57, subdivision (l)(1) provides that claims for reimbursement of corrective action costs that are received by the Fund more than 365 days after the date of a uniform closure letter or a letter of commitment, whichever occurs later, shall not be reimbursed unless specified conditions are satisfied.

CORRECTED
6/27/14

II. FINDINGS

Based upon the UST Case Closure Summary prepared for the case attached hereto, the State Water Board finds that corrective action taken to address the unauthorized release of petroleum at the UST release site identified as:

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ensures protection of human health, safety, and the environment and is consistent with Chapter 6.7 of division 20 of the Health and Safety Code, and implementing regulations, the Low-Threat Closure Policy and other water quality control policies and applicable water quality control plans.

Pursuant to the Low-Threat Closure Policy, notification has been provided to all entities that are required to receive notice of the proposed case closure, a 60-day comment period has been provided to notified parties, and any comments received have been considered by the State Water Board in determining that the case should be closed.

Pursuant to section 21080.5 of the Public Resources Code, environmental impacts associated with the adoption of this Order were analyzed in the substitute environmental document (SED) the State Water Board approved on May 1, 2012. The SED concludes that all environmental effects of adopting and implementing the Low Threat Closure Policy are less than significant, and environmental impacts as a result of adopting this Order in compliance with the Policy are no different from the impacts that are reasonably foreseen as a result of the Policy itself. A Notice of Decision was filed August 17, 2012. No new environmental impacts or any additional reasonably foreseeable impacts beyond those that were addressed in the SED will result from adopting this Order.

The UST case identified above may be the subject of orders issued by the Regional Water Quality Control Board (Regional Water Board) pursuant to division 7 of the Water Code. Any orders that have been issued by the Regional Water Board pursuant to division 7 of the Water Code, or directives issued by a Local Oversight Program (LOP) agency for this case should be rescinded to the extent they are inconsistent with this Order.

CORRECTED
6/27/14

III. ORDER

IT IS THEREFORE ORDERED that:

A. The UST case identified in Section II of this Order, meeting the general and media-specific criteria established in the Low-Threat Closure Policy, be closed in accordance with the following conditions and after the following actions are complete. Prior to the issuance of a uniform closure letter, the Petitioner is ordered to:

1. Properly destroy monitoring wells and borings unless the owner of real property on which the well or boring is located certifies that the wells or borings will be maintained in accordance with local or state requirements;

2. Properly remove from the site and manage all waste piles, drums, debris, and other investigation and remediation derived materials in accordance with local or state requirements; and

3. Within six months of the date of this Order, submit documentation to the regulatory agency overseeing the UST case identified in Section II of this Order that the tasks in subparagraphs (1) and (2) have been completed.

B. The tasks in subparagraphs (1) and (2) of Paragraph (A) are ordered pursuant to Health and Safety Code section 25296.10 and failure to comply with these requirements may result in the imposition of civil penalties pursuant to Health and Safety Code section 25299, subdivision (d)(1). Penalties may be imposed administratively by the State Water Board or Regional Water Board.

C. Within 30-days of receipt of proper documentation from the Petitioner that requirements in subparagraphs (1) and (2) of Paragraph (A) are complete, the regulatory agency that is responsible for oversight of the UST case identified in Section II of this Order shall notify the State Water Board that the tasks have been satisfactorily completed.

D. Within 30-days of notification from the regulatory agency that the tasks are complete pursuant to Paragraph (C), the Deputy Director of the Division of Water Quality shall issue a uniform closure letter consistent with Health and Safety Code section 25296.10, subdivision (g) and upload the uniform closure letter and UST Case Closure Summary to GeoTracker.

E. Pursuant to section 25299.57, subdivision (l) (1), and except in specified circumstances, all claims for reimbursement of corrective action costs must be received by the Fund within 365-days of issuance of the uniform closure letter in order for the costs to be considered.

F. Any Regional Water Board or LOP agency directive or order that directs corrective action or other action inconsistent with case closure for the UST case identified in Section II is rescinded, but only to the extent the Regional Water Board order or LOP agency directive is inconsistent with this Order.

Thomas Howard
Executive Director

11/21/13
Date

CORRECTED
6/27/14

UST CASE CLOSURE SUMMARY (REVISED 10/30/13)

Agency Information

Agency Name: County of Santa Clara, Department of Environmental Health (County)	Address: 1555 Berger Drive #300 San Jose, CA 95112
Agency Caseworker: Mr. Gerald O'Regan	Case No.: 06S1E32D01f

Case Information

USTCF Claim No.: 2333	Global ID: T0608501342
Site Name: Spartan Gas	Site Address: 1415 Oakland Road San Jose, CA 95112 (Site)
Petitioner: Mr. Tom Kearney Caster Companies, Inc.	Address: 4607 Mission Gorge Place San Diego, CA 92120
USTCF Expenditures to Date: $792,462	Number of Years Case Open: 22

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501342

Summary

The Low-Threat Underground Storage Tank Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Low-Threat Policy. This Case meets all of the required criteria of the Policy. A summary evaluation of compliance with the Policy is shown in **Attachment 1: Compliance with State Water Board Policies and State Law**. The Conceptual Site Model upon which the evaluation of the Case has been made is described in **Attachment 2: Summary of Basic Site Information.** Highlights of the Conceptual Site Model of the Case are as follows:

The release at the Site was discovered in January 1991. The former underground storage tanks (USTs) were removed from the Site in March 1993. During 1999, approximately 2,162 cubic yards of contaminated soil was excavated to depths ranging from 14 to 16 feet below ground surface (bgs). During 2006, air sparging/vapor extraction system was operated at the Site from mid-June to December. Approximately 6 gallons of petroleum hydrocarbons were removed during system operations. The Site is currently operated as a storage facility. No USTs remain on-Site.

The petroleum release is limited to soil and groundwater to a depth of approximately 40 feet bgs. The nearest surface body is Coyote Creek located approximately 1,500 feet northeast. The nearest public supply well regulated by the California Department of Public Health is located approximately 3,000 feet southeast of the Site. Public water is supplied by Santa Clara Valley Water District. The affected groundwater beneath the Site is not currently being used as a source of drinking water or for any other designated beneficial use, and it is highly unlikely that the affected groundwater will be used as a source of drinking water or for any other beneficial use in the foreseeable future.

Public supply wells are usually constructed with competent sanitary seals and intake screens that are in deeper more protected aquifers. Remaining petroleum constituents are limited, stable and declining. Remedial actions have been implemented and further remediation is not necessary. Additional assessment/monitoring will not likely change the conceptual model. Any remaining petroleum constituents do not pose significant risk to human health, safety or the environment.

Rationale for Closure under the Policy

- General Criteria – Site **MEETS ALL EIGHT GENERAL CRITERIA** under the Policy.

- Groundwater Media-Specific Criteria – Site meets the criterion in **CLASS 5**. Free product has been removed to the maximum extent practicable, is stable to decreasing, and does not extend off-Site. The plume has been stable or decreasing for a minimum of five years. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary. The property owner is willing to accept a land use restriction if the regulatory agency requires a land use restriction as a condition of closure.

- Petroleum Vapor Intrusion to Indoor Air – Site meets **CRITERIA (2) b**. A Site-specific risk assessment for the vapor intrusion pathway was conducted and demonstrates that human health is protected.

  During 2011 Human Health Risk Assessment (HHRA), Risk-Based Screening Levels (RBSLs) and calculated daily absorbed dose were applied for potentially complete vapor intrusion pathway involving residential and commercial land use. The evaluation of vapor intrusion pathway did not indicate significant risk.

- Direct Contact and Outdoor Air Exposure – Site meets **CRITERIA (3) b**. A Site-specific risk assessment from exposure shows that maximum concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health.

Objections to Closure

County staff objected to UST case closure because:

1. The downgradient portion of the contaminant plume has migrated onto a school property which is located to the west of the site. A construction project consisting of approximately 20,000 square feet is underway on the school property. One of the buildings is located near the downgradient portion of the contaminant plume. This building includes an approximately 4,000 square foot basement which is 13 feet deep.
   RESPONSE: The contaminant plume that exceeds WQOs from the on-Site source has migrated beneath a parking lot for the adjacent school property. During 2011, an HHRA was conducted during construction of the school building located approximately 200 feet downgradient and west of the on-Site secondary source area. Soil samples collected from soil borings MW-6 and MW-7 beneath the driveway of the adjacent school building indicate non-detect concentrations for TPHg. Since 2003, benzene concentrations in wells AS-28B and AS-29B have been below 100 micrograms per liter (µg/L).

   Indoor air samples were collected from the basement of the school building during 2011. The HHRA states that benzene concentrations were essentially identical in interior and exterior air

CORRECTED
6/27/14

samples, indicating no significant dose contribution from interior sources. An outdoor air sample was also collected to the west of the Site to determine ambient air and air quality in the area above known soil and groundwater impact. The HHRA also states that outdoor air does not appear to pose a significant risk above that posed by the ambient air concentrations.

2. Several wells in the southern portion of the plume have significant levels of benzene. The downgradient edge of the southern portion of the plume is moving toward the west and the extent of this portion of the plume is not defined. Additional assessment including construction of additional monitoring wells will be required to define the downgradient edge of the southern portion of the plume.
   RESPONSE: There are two water-bearing zones, A Zone and B Zone, beneath the Site. The petroleum hydrocarbon plume to the northwest is delineated by wells AS-21A and AS-23A in the A Zone and by wells AS-28B, MW-1, and MW-26 in the B Zone. Groundwater concentrations in AS-21A, AS-23A, AS-28B, and MW-1 have been below WQOs since 2010. Groundwater concentrations in MW-26 were low to non-detect between 2003 and the last sampling event in 2008.

3. Dissolved concentrations and free product require additional active remediation so that the site will reach cleanup goals in a reasonable time frame.
   RESPONSE: During 1999, approximately 2,162 cubic yards of contaminated soil was excavated to depths between 14-16 feet bgs. An air sparging/vapor extraction system was operated at the Site from June-December 2006. Approximately 6 gallons of petroleum hydrocarbons were removed from the Site. Free product was observed since 2008 directly beneath the former USTs in wells AS-8B, and AS-23B and in the downgradient well MW-19A. During 2013, free product thicknesses in wells AS-8B, AS-23B, and MW-19A were 0.02 feet, 0.09 feet, and 0.01 feet, respectively. No free product has ever been reported off-Site. Free product has been removed to the maximum extent practicable. Further remediation is not necessary.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, the environment and is consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations, applicable state policies for water quality control and the applicable water quality control plan, and case closure is recommended.

Prepared By: _____ 10/30/13
Charlow Arzadon — Date
Water Resource Control Engineer

Reviewed By: _____ 10/30/13
Benjamin Heningburg, PG No. 8130 — Date
Senior Engineering Geologist

ATTACHMENT 1: COMPLIANCE WITH STATE WATER BOARD POLICIES AND STATE LAW

The Site complies with State Water Resources Control Board policies and state law. Section 25296.10 of the Health and Safety Code requires that Sites be cleaned up to protect human health, safety, and the environment. Based on available information, any residual petroleum constituents at the Site do not pose significant risk to human health, safety, or the environment.

The Site complies with the requirements of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.[1]

Is corrective action consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations? The corrective action provisions contained in Chapter 6.7 of the Health and Safety Code and the implementing regulations govern the entire corrective action process at leaking UST sites. If it is determined, at any stage in the corrective action process, that UST case closure is appropriate, further compliance with corrective action requirements is not necessary. Corrective action at this Site has been consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations and, since this case meets applicable case-closure requirements, further corrective action is not necessary, unless the activity is necessary for case closure.	☒ Yes ☐ No
Have waste discharge requirements or any other orders issued pursuant to Division 7 of the Water Code been issued at this Site?	☐ Yes ☒ No
If so, was the corrective action performed consistent with any order?	☐ Yes ☐ No ☒ NA
<u>General Criteria</u> General criteria that must be satisfied by all candidate sites: **Is the unauthorized release located within the service area of a public water system?** **Does the unauthorized release consist only of petroleum?** **Has the unauthorized ("primary") release from the UST system been stopped?** **Has free product been removed to the maximum extent practicable?** **Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?**	 ☒ Yes ☐ No ☒ Yes ☐ No ☒ Yes ☐ No ☒ Yes ☐ No ☐ NA ☒ Yes ☐ No

[1] Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

Has secondary source been removed to the extent practicable?	☒ Yes ☐ No
Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code, Section 25296.15?	☒ Yes ☐ No
Does nuisance as defined by Water Code, section 13050 exist at the Site?	☐ Yes ☒ No
Are there unique Site attributes or Site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?	☐ Yes ☒ No
<u>Media-Specific Criteria</u> Candidate sites must satisfy all three of these media-specific criteria: **1. Groundwater:** To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:	
Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?	☒ Yes ☐ No ☐ NA
Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites? If YES, check applicable class: ☐ **1** ☐ **2** ☐ **3** ☐ **4** ☒ **5**	☒ Yes ☐ No ☐ NA
For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?	☐ Yes ☐ No ☒ NA
2. Petroleum Vapor Intrusion to Indoor Air: The Site is considered low-threat for vapor intrusion to indoor air if Site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies.	
Is the Site an active commercial petroleum fueling facility? Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk.	☐ Yes ☒ No
a. Do Site-specific conditions at the release Site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4? If YES, check applicable scenarios: ☐ **1** ☐ **2** ☐ **3** ☐ **4**	☐Yes ☐ No ☒ NA

CORRECTED
6/27/14

b. Has a Site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?	☒ Yes ☐ No ☐ NA
c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?	☐ Yes ☐ No ☒ NA
3. Direct Contact and Outdoor Air Exposure: The Site is considered low-threat for direct contact and outdoor air exposure if Site-specific conditions satisfy one of the three classes of sites (a through c).	
a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?	☐ Yes ☐ No ☒ NA
b. Are maximum concentrations of petroleum constituents in soil less than levels that a Site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health?	☒ Yes ☐ No ☐ NA
c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?	☐ Yes ☐ No ☒ NA

ATTACHMENT 2: SUMMARY OF BASIC INFORMATION (Conceptual Site Model)

Site Location/ History

- The Site is located at the intersection of Oakland Road and East Gish Road in San Jose. The Site is operated as a self-storage building.
- The Site is bounded by commercial properties.
- Nature of Contaminants of Concern: Petroleum hydrocarbons only.
- Primary Source of Release: UST system
- Discovery Date: 1991
- Release Type: Petroleum[2]
- Free Product: Observed in wells AS-8B, AS-23B, and MW-19A between 2008 and 2013.

Table A. USTs:

Tank No.	Size	Contents	Status	Date
1	6,000 gallon	Gasoline	Removed	1993
2	1,000 gallon	Gasoline	Removed	1993
3	550 gallon	Gasoline	Removed	1993
4	350 gallon	Gasoline	Removed	1993
5	350 gallon	Gasoline	Removed	1993
6	350 gallon	Gasoline	Removed	1993
7	175 gallon	Gasoline	Removed	1993
8	175 gallon	Gasoline	Removed	1993
9	175 gallon	Gasoline	Removed	1993

Receptors

- Groundwater Basin: Santa Clara Valley
- Groundwater Beneficial Uses: Municipal and domestic supply (MUN); agricultural supply (AGR); freshwater replenishment (FRESH); industrial service supply (IND); industrial process supply (PROC)
- Designated Land Use: General commercial (GC)
- Public Water System: Santa Clara Valley Water District
- Distance to Nearest Surface Waters: Coyote Creek is located approximately 1,500 feet northeast.
- Distance to Nearest Supply Wells: Supply well is located approximately 3,000 feet to the south-southeast.

Geology/ Hydrogeology

- Average Groundwater Depth: ~15 feet bgs (A zone); ~18 feet bgs (B zone)
- Minimum Groundwater Depth: ~10 feet bgs (A zone); ~10 feet bgs (B zone)
- Groundwater Flow Direction: predominantly west (A zone); northwest (B zone)
- Geology: Soil consists of silty sands to a depth of 10 to 15 feet bgs. Below 15 feet bgs consists of silty clay or clay.
- Hydrogeology: Groundwater beneath the site is unconfined.

[2] "Petroleum" means crude oil, or any fraction thereof, which is liquid at standard conditions of temperature and pressure, which means at 60 degrees Fahrenheit and 14.7 pounds per square inch absolute.
(Health & Saf. Code, § 25299.2.)

Corrective Actions

- Nine USTs were removed from facility in 1993.
- During 1999, approximately 2,162 cubic yards of contaminated soil was excavated to depths ranging from 14-16 feet bgs.
- Approximately 6 gallons of petroleum hydrocarbons were removed from the Site during the operation of an air sparging/vapor extraction system between June-December 2006.

Table B. Concentrations of Petroleum Constituents in Soil

Constituent	Maximum 0-5 feet bgs (mg/kg)	Maximum 5-10 feet bgs (mg/kg)
Benzene	9.8	24
Ethylbenzene	2.1	9.5
Naphthalene	Not Analyzed	Not Analyzed
PAHs*	Not Analyzed	Not Analyzed

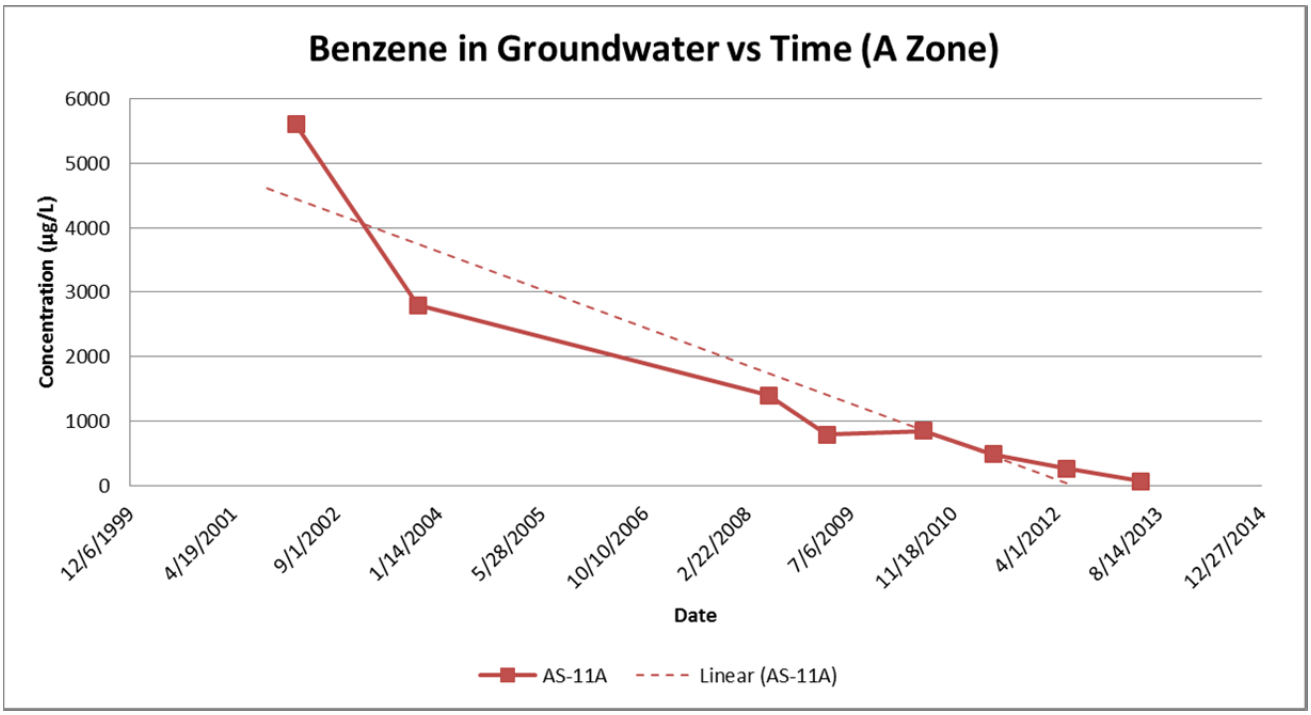
*Poly-aromatic hydrocarbons as benzo(a)pyrene toxicity equivalent

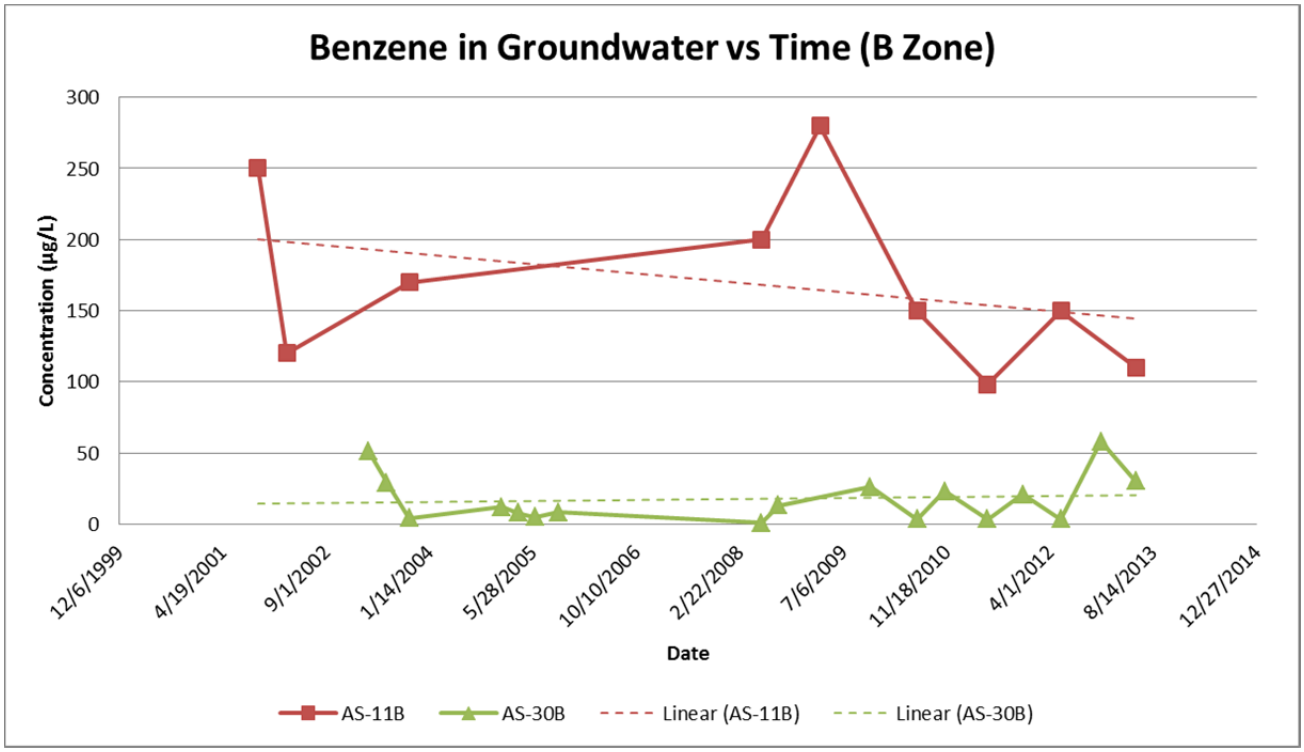
Table C. Concentrations of Petroleum Constituents in Groundwater (2013)

Well ID	Sample Date	TPHg	TPHd	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1	5/20/13	<50	<50	<0.5	<0.5	<0.5	<0.5	**6.7**
MW-17A	5/21/13	120	69	<0.5	4.1	<0.5	<0.5	<30
MW-18B	5/21/13	1,600	1,100	**69**	15	1.8	6.5	<45
MW-20B	5/21/13	4,200	2,000	**240**	18	2.7	15	<45
MW-21A	5/21/13	6,200	2,700	**170**	31	9.0	16	<350
MW-24B	5/20/13	1,200	1,700	**76**	6.6	2.5	5.0	<45
AS-11A	5/21/13	1,100	510	**67**	4.3	<1.0	2.1	<70
AS-11B	5/21/13	3,800	1,900	**110**	14	3.3	16	<110
AS-21A	5/20/13	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
AS-28B	5/16/13	110	98	<0.5	2.0	<0.5	0.62	<5.0
AS-29A	5/16/13	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
AS-30B	5/16/13	2,500	1,200	**30**	13	<1.7	12	<45
AS-31A	5/16/13	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
AS-32B	5/16/13	<50	<50	<0.5	<0.5	<0.5	<0.5	**6.0**
WQOs		**--**	**--**	**1**	**150**	**700**	**1,750**	**5.0**

Notes:
DTW – depth to water
TPHg – total petroleum hydrocarbons as gasoline
TPHd – total petroleum hydrocarbons as diesel
MTBE- methyl tert-butyl ether
µg/L – micrograms per liter
"<" – indicates result is below the laboratory reporting limit

Groundwater Trends:
Reported concentrations of benzene at the Site have demonstrated stable or decreasing trends.



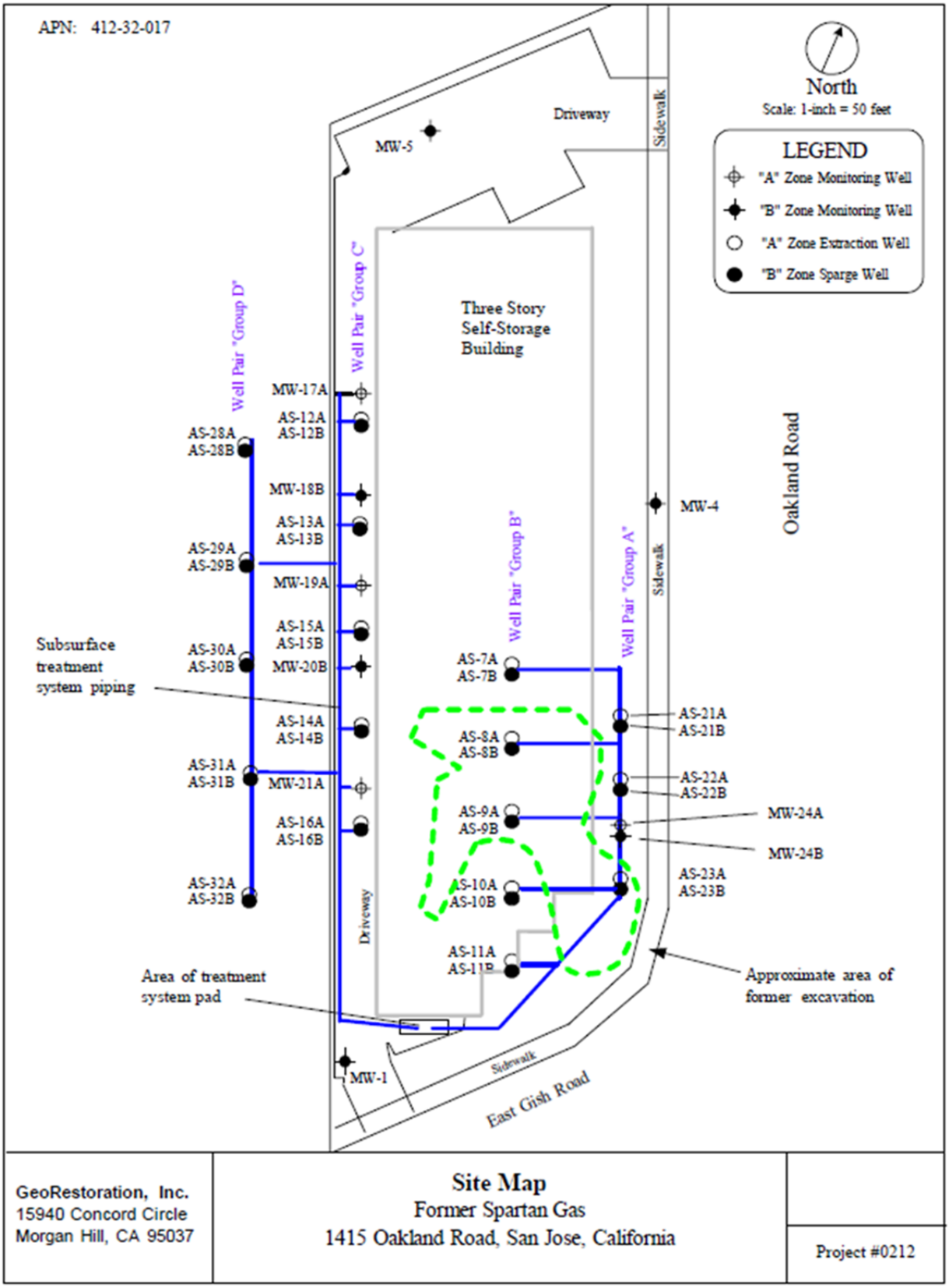


Evaluation of Risk Criteria

- Maximum Petroleum Constituent Plume Length above WQOs: Benzene plume < 350 feet.
- Petroleum Constituent Plume Determined Stable or Decreasing: Yes.
- Soil/Groundwater Sampled for MTBE: Yes, see Table C above.
- Residual Petroleum Constituents Pose Significant Risk to the Environment: No.
- Residual Petroleum Constituents Pose Significant Vapor Intrusion Risk to Human Health: No – Petroleum constituents most likely to pose a threat for vapor intrusion were removed during soil excavation and over-excavation. Site conditions demonstrate that the residual petroleum constituents in soil and groundwater are protective of human health.
- Residual Petroleum Constituents Pose a Nuisance[3] at the Site: No.
- Residual Petroleum Constituents in Soil Pose Significant Risk of Adversely Affecting Human Health: No – No significant soil contamination has been identified in the upper 10 feet. Residual Petroleum Constituents Pose Significant Direct Contact and Outdoor Air Exposure to Human Health: No – The majority of the contaminated soil on-Site was removed to depths of 14 to 16 feet. The excavation was backfilled with clean fill and covered with concrete slab or landscaping. The Site-specific HHRA states that outdoor air does not appear to pose a significant risk above that posed by the ambient air concentrations. Therefore, dermal exposure and outdoor air exposure poses low threat to human health.

[3] Nuisance as defined in California Water Code, section 13050, subdivision (m).

CORRECTED
6/27/14



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6/27/14