Atlantic Richfield Company

Chuck Carmel
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May 1, 2014

Re: Case Closure Request Addendum
Atlantic Richfield Company Station #472
6415 International Boulevard, Oakland, California
ACEH Case #RO00002982

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Submitted by,

Chuck Carmel
Remediation Management Project Manager

Attachment

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May 1, 2014 Project No. 09-88-601

Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583
Submitted via ENFOS

Attn.: Mr. Chuck Carmel

Re: Additional Well Survey Information and Case Closure Request Addendum, Former Richfield Oil Company Station No.472, 6415 International Boulevard, Oakland, California; ACEH Case No. RO0002982

Dear Mr. Carmel

Broadbent & Associates, Inc. (Broadbent) is pleased to submit this *Additional Well Survey Information and Case Closure Request Addendum* (Well Survey and Closure Addendum) for Former Richfield Oil Company Station No.472 (also known as Pluckey's Liquors) located at 6415 International Boulevard, Oakland, California (Site). The preceding documents entitled *Conceptual Site Model and Case Closure Request* (Closure Request), *Conceptual Site Model and Case Closure Request Addendum,* and *Case Closure Addendum* (Previous CCR Addendums) were submitted to the Alameda County Environmental Health Agency (ACEH) on June 19, 2013, October 8, 2013; and February 25, 2014; respectively. This Well Survey Closure Addendum was prepared in response to a letter issued by the ACEH dated April 25, 2014 (ACEH Letter). This letter provided comments on the most recent Previous CCR Addendum, and which indicated that the Site would meet the criteria for case closure based on the *Low Threat Underground Storage Tank Case Closure Policy* (LTCP; CSWRCB, 2012), provided additional well survey information was submitted. Specifically, the ACEH requested a table summarizing the results of the recent well search (including pertinent well information regarding well identification, type, depth, and distance from Site). The ACEH letter also requested clarification as to what well types were being considered as receptors. These specific request were prepared and the results of this evaluation are presented below.

Well Search Table and Results

As requested by the ACEH, a table summarizing the well survey results (including the recent Alameda County Public Works Agency [ACPWA] and the 2011 Califonria Department of Water Resources [DWR]) was prepare and is included as Table 1. In the most recent Previous CCR Addendum, only the wells with potential use (domestic, industrial, irrigation, and municipal) were included on the survey results map. These wells are the only wells considered potential receptors, as is clearly noted in the LTCP groundwater specific criteria, which identifies nearest 'water supply wells' or surface water bodies as nearby receptors. A total of four water supply wells (one irrigation and three industrial) are listed in Table 1. Additionally, all other results from the well survey activities are summarized in this table. These results include monitoring, cathodic protection, borings, extraction/vapor, abandoned, destroyed, test, and piezometer wells. However, these wells are not considered receptors due to them not being used for any water supply application.

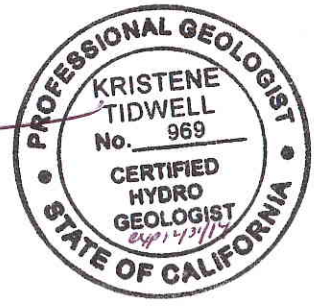
As indicated on Table 1, only one well is located within 1000 feet of the Site. This well is a cathodic protection well located 855 feet to the east of the Site. Although this well is within 1000 feet of the Site, it is not considered a receptor and it is also not considered a vertical conduit due to its proximity to the Site. As noted in the most recent Previous CCR Addendum, the *Technical Justification for Groundwater Plume Lengths, Indicator Constituents, Concentrations, and Buffer Distances (Separation Distances) to Receptors* (LTCP Guidance; SWRCB, 2011), which is the guidance document used for plume lengths and concentraitons for the LTCP, was reviewed. The purpose of the LTCP Guidance was to justify the plume lengths for the four groundwater plume scenarios as presented in the LTCP. The longest plume length noted in the LTCP Guidance for GRO was 855 feet. Since the cathodic protection well is to the east and crossgradient of the Site, and is at the maximum plume length for GRO, this well would not act as a significant vertical conduit for contaminant migration.

Closing

The data and Site evaluation presented in this Addendum as well as the Closure Request indicate that this Site meets the criteria of the Low Threat Closure UST Policy. Residual impacts in groundwater beneath the Site have degraded since the station was in operation several decades ago, and the most toxic compounds (BTEX) are not currently present in groundwater or soil at the Site. We recommend that a No Further Action Letter be issued for this Site. Well decommissioning and final closure activities will be coordinated upon concurrence with the Closure Request and this Addendum from the ACEH.

Should you have questions or require additional information, please do not hesitate to contact us at (707) 455-7290.

Sincerely,
BROADBENT & ASSOCIATES, INC.



Kristene Tidwell, P.G., C.Hg.
Senior Geologist

Attachment

Table 1 - Well Survey Results

References

State Water Resources Control Board (SWRCB), 2012. Low-Threat Underground Storage Tank Case Closure Policy, August 17.

State Water Resources Control Board (SWRCB), 2011. Technical Justification for Plume Lengths. July 12.