

13 March 2024

**MEMORANDUM**

To: The City of Emeryville as Successor Agency to the Emeryville Redevelopment Agency (Successor Agency)

From: Earl James, PG (EKI)  
 Joy Su, PE (EKI)  
 Ryan Ford, PG (EKI)



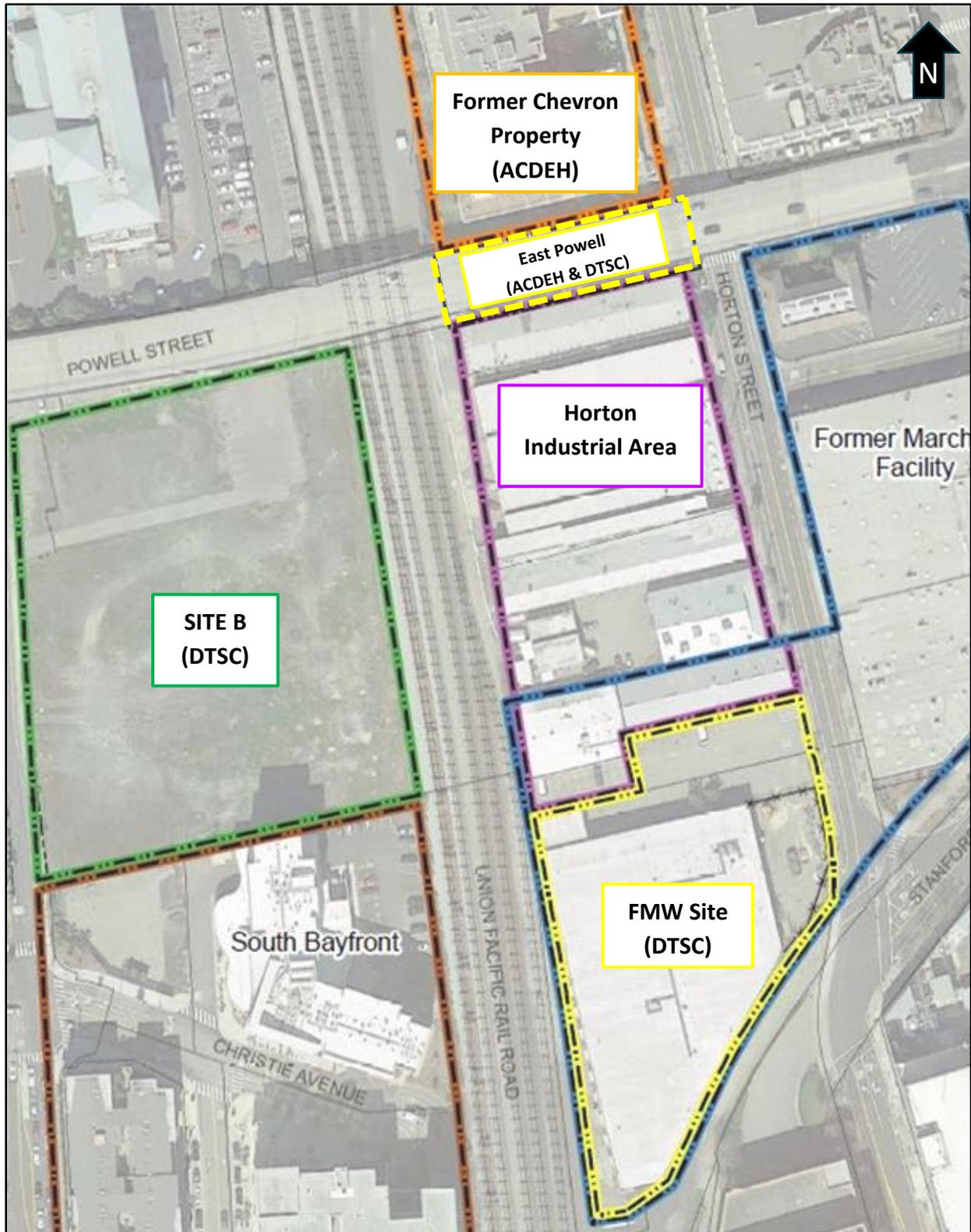
Subject: Comments on Proposed Case Closure and Revised Conceptual Site Model  
 Former Chevron Asphalt Plant and Bulk Terminal (Chevron Site No. 20-6265)  
 Cleanup Program Site (CPS) Case No. RO0002535  
 Geotracker Global ID SLT2007076  
 1520 Powell Street, Emeryville, CA 94608  
 (EKI A40028.01)

EKI Environment & Water, Inc. (EKI) is pleased to submit this memorandum in response to the invitation for public comment on the proposed case closure of the Former Chevron Asphalt Plant and Bulk Terminal (Former Chevron Property) located at 1520 Powell Street in Emeryville, California (Figure 1). The naming convention of the “Former Chevron Property” is in deference to the convention used among interested stakeholders, both environmental consultants and regulatory agencies, and for consistency with historical technical reports. Regulatory oversight for the Former Chevron Property is provided by the Alameda County Department of Environmental Health (ACDEH). Arcadis, consultant for the Former Chevron Property, prepared a *Revised Conceptual Site Model and Closure Request*, dated 28 June 2023 (Fourth Closure Request) and submitted it to ACDEH for review. Three previous closure requests were submitted to ACDEH in 1990, 2006, and 2012 [WGR, 1990; Cambria, 2006; Arcadis, 2012]. In a letter dated 15 February 2024, ACDEH agreed with Chevron’s Fourth Closure Request and specified a public comment period from 28 February to 28 March 2024 for the proposed case closure of the Former Chevron Property [ACDEH, 2024].

EKI has prepared these comments for our client, the City of Emeryville as Successor Agency to the Emeryville Redevelopment Agency (Successor Agency) to submit to ACDEH by 28 March 2024: 1) to provide ACDEH with a summary of environmental investigation and remediation work being conducted to the southwest and downgradient of the Former Chevron Property at South Bay Front Site B (Site B) and farther south of the Former Chevron Property at the Former Marchant/Whitney Site (FMW Site) by the Successor Agency under the oversight of the Department of Toxic Substances Control (DTSC), 2) to correct misstatements of fact in Chevron’s Fourth Closure Request, and 3) to respond to an inquiry by Chevron’s consultant asking if the Successor Agency wants to “inherit” Former Chevron Property groundwater monitoring wells in Powell Street.

**SUMMARY OF ENVIRONMENTAL INVESTIGATION AND REMEDIATION WORK DOWNGRADIENT AND IN THE VICINITY OF THE FORMER CHEVRON PROPERTY**

The location of the Former Chevron Property in relation to Site B and the FMW Site is shown below in Figure 1. Figure 1 also shows other areas of significance such as East Powell and the Horton Industrial Area.



**Figure 1: Site Vicinity Map and Regulatory Agency Providing Oversight** (parenthetically listed if regulated), figure adapted from EKI [2023].

An overview of environmental investigation and remediation work at the Former Chevron Property, East Powell, Site B, the Horton Industrial Area, and the FMW Site is provided below.

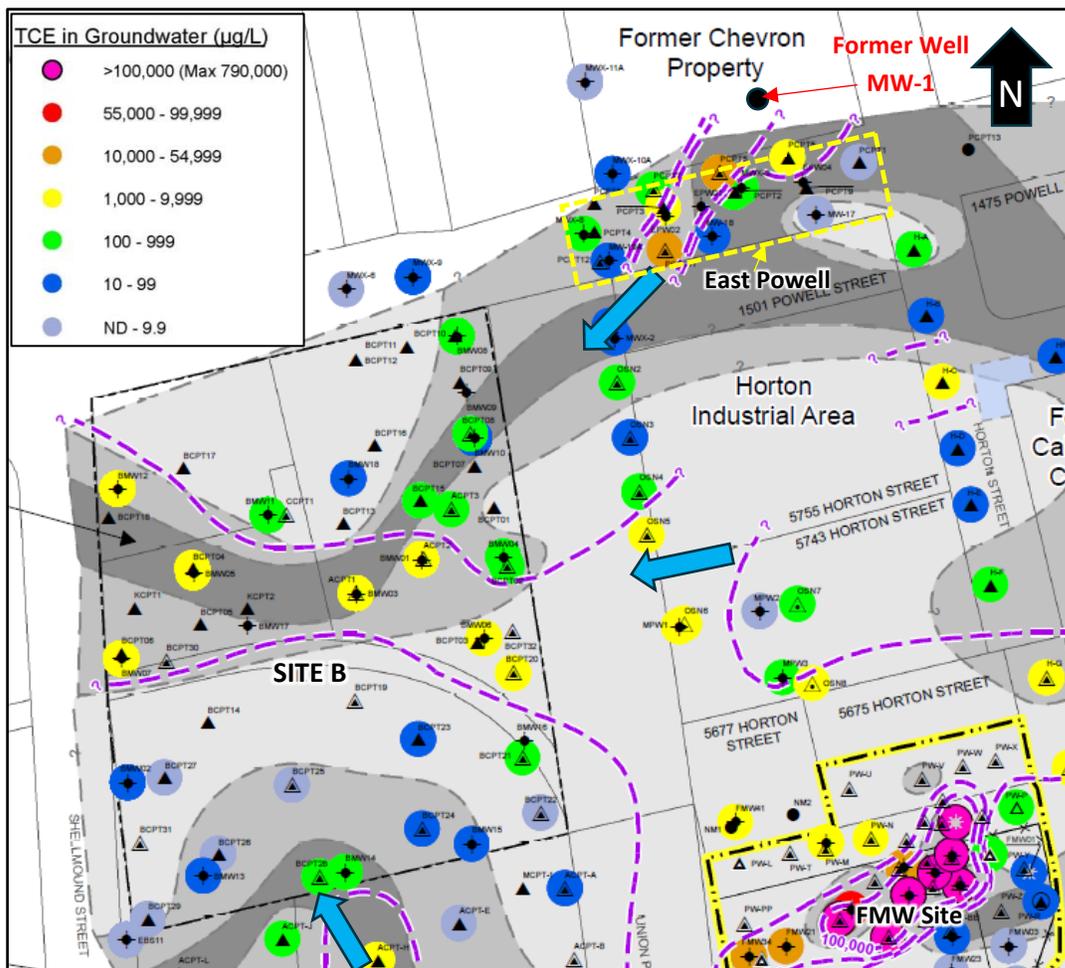
- **Former Chevron Property – Under ACDEH Oversight:** The Former Chevron Property is a former asphalt plant and bulk terminal located at 1520 Powell Street in Emeryville, California (Figure 1). The Former Chevron Property was operated as a bulk fueling facility and asphalt testing laboratory from the early 1950s until June 1987 [Cambria, 2006]. For at least 30 years, various pavement products were researched and marketed in the asphalt testing laboratory which occupied a building and associated loading dock facilities in the southwest corner of the site. Starting sometime in the 1960s, a solvent handler (Nash Solvents) also occupied a building (labeled as the shed and storeroom) in the northeast corner of the site [Cambria, 2006; Arcadis, 2012]. The Former Chevron Property was identified as a potential off-site source of chlorinated volatile organic compounds (CVOCs) to Site B in Site B's *Final Feasibility Study/Remedial Action Plan (FS/RAP)*, dated March 2008 and approved by DTSC, [EKI, 2008]. Soil excavations were conducted on the Former Chevron Property in 1989, 1990, and 1992 which included the removal of contaminated soil. The 1989 excavation removed soil in the southwest portion of the Former Chevron Property near the former office building and asphalt testing laboratory and facilities that were impacted by CVOCs (including trichloroethene (TCE)) [WGR, 1990; Cambria, 2006; Arcadis, 2012; Arcadis, 2023b]. CVOC-impacted groundwater was also detected beneath the Former Chevron Property at up to 280 micrograms per liter (ug/L) of TCE, 5,900 ug/L of cis-1,2-dichloroethene (cDCE), and up to 1,800 ug/L of vinyl chloride (VC) in on-site well MW-1 [Arcadis, 2012]. Notably, well MW-1, where the maximum detection of TCE in shallow groundwater has been measured on the Former Chevron Property, is located less than 50 feet from the southern property boundary that borders East Powell. Additional soil excavation was conducted in 1999 during construction of the current parking garage and condominium complex which sits on the southern portion of the Former Chevron Property [Cambria, 2006]. Although excavations have been conducted to remediate contaminated soil and to construct a parking garage, the data indicate that residual mass (i.e., left in place during soil excavations between 1989 and 1999) associated with historic operations at the Former Chevron Property remains along the southwestern and southern edge of the property behind the former office building and asphalt testing laboratory [Arcadis, 2012] and is collocated with remaining CVOC impacted shallow groundwater [Arcadis, 2023b]. Note the impacts in soil associated with the southwest corner of Former Chevron Property also extend approximately 30 feet off-site onto the UPRR property, where the highest TCE concentration of 15,000 micrograms per kilograms was detected in soil boring SB-42 [Arcadis, 2012].
  - Additional information on the Former Chevron Property can be accessed from the Geotracker website at:  
[https://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=SLT2007076](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SLT2007076)
- **East Powell – Under ACDEH and DTSC Oversight:** East Powell is located immediately downgradient of the Former Chevron Property and is a section of Powell Street beneath the Powell Street overpass between the Union Pacific Railroad (UPRR) tracks and Horton Street. East Powell is currently used for public parking (Figure 1). In August 2009, a groundwater investigation was conducted at East Powell as part of off-site investigation activities for Site B and up to 16,200 ug/L of TCE was detected in shallow groundwater along the northern boundary of East Powell that borders the Former Chevron Property and is located directly downgradient of a historical Chevron well MW-1 (where the highest concentrations of CVOCs were detected

on the Former Chevron Property) [EKI, 2011]. Based on these data, in-situ bioremediation injections were conducted at East Powell by the Successor Agency as the upgradient off-site shallow groundwater remedial component of the revised remedy for Site B, documented in Site B's *Final Remedial Action Plan Amendment and Remedial Design and Implementation Plan for Shallow Groundwater* (2013 RAP Amendment; [EKI, 2013a]) and approved by DTSC after public comment. As stated in Site B's 2013 RAP Amendment, for East Powell, "injection of additional amendments or other additional remedial actions may be conducted by others as part of remediation of upgradient sources by other parties if CVOC concentrations increase significantly" [EKI, 2013a]. To date, no such activities have been conducted by others. Further details regarding investigation and remedial work at East Powell are provided in the following subsection.

- **Site B – Under DTSC Oversight:** Site B is located to the southwest and downgradient of the Former Chevron Property at 5770 Shellmound Street in Emeryville, California (Figure 1). The primary CVOCs in groundwater at Site B are PCE, TCE, cDCE, and VC. Groundwater remedial activities for Site B included on-site in-situ bioremediation injections at Site B and off-site in-situ bioremediation injections at East Powell, as described above, in accordance with Site B's 2013 RAP Amendment [EKI, 2013a]. In recent groundwater monitoring data (the Agency monitors 3 wells in East Powell), an increasing trend in total CVOC concentrations was observed in the northeast corner of Site B and the southwest corner of East Powell. This trend indicates that residual mass of CVOCs (primarily TCE) is emanating from the Former Chevron Property and continues to impact downgradient sites (East Powell and Site B).
  - Additional information on Site B can be accessed from DTSC's Envirostor website at: [https://www.envirostor.dtsc.ca.gov/public/profile\\_report?global\\_id=70000131](https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=70000131)
- **Horton Industrial Area:** The Horton Industrial Area is a collection of 5 individually owned properties with lengthy histories of light industrial/commercial land use on the east side of the UPRR tracks immediately to the south of East Powell [EKI, 2015]. The Horton Industrial Area is cross-gradient from the Former Chevron Property and East Powell. One property at the southern end of the Horton Industrial Area, the Michel and Pelton Site at 5743 Horton Street (formerly known as Landregan Street), was previously identified on the Geotracker database and listed as an open but inactive site under the oversight of the San Francisco Bay Regional Water Quality Control Board (RWQCB); however, this site is not found on Geotracker as of March 2024.
- **FMW Site – Under DTSC Oversight:** The FMW Site is located at 5679 Horton Street in Emeryville, California (Figure 1) and is approximately 400 feet to the south and cross-gradient of the Former Chevron Property and East Powell. Although the FMW Site is also impacted by CVOCs, its distance and location cross-gradient from the Former Chevron Property and East Powell preclude CVOC impacted groundwater from the FMW Site from impacting groundwater at the Former Chevron Property, East Powell, or the northeast portion of Site B.
  - Additional information on the FMW Site can be accessed from DTSC's Envirostor website at: [https://www.envirostor.dtsc.ca.gov/public/profile\\_report?global\\_id=60001628](https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60001628)

### Further Details of Environmental Investigation and Remedial Work at East Powell

Figure 2 below summarizes TCE concentrations in shallow groundwater prior to in-situ bioremediation injection activities at East Powell and Site B [EKI, 2016] and indicates that residual mass (i.e., left in place during soil excavations between 1989 and 1999) associated with historic operations at the Former Chevron Property is an upgradient source of CVOC in shallow groundwater to East Powell and Site B, as described in Site B's 2008 FS/RAP and 2013 RAP Amendment. Figure 2 also shows the location of historical Chevron well MW-1, where the highest concentrations of CVOCs were detected on the Former Chevron Property.



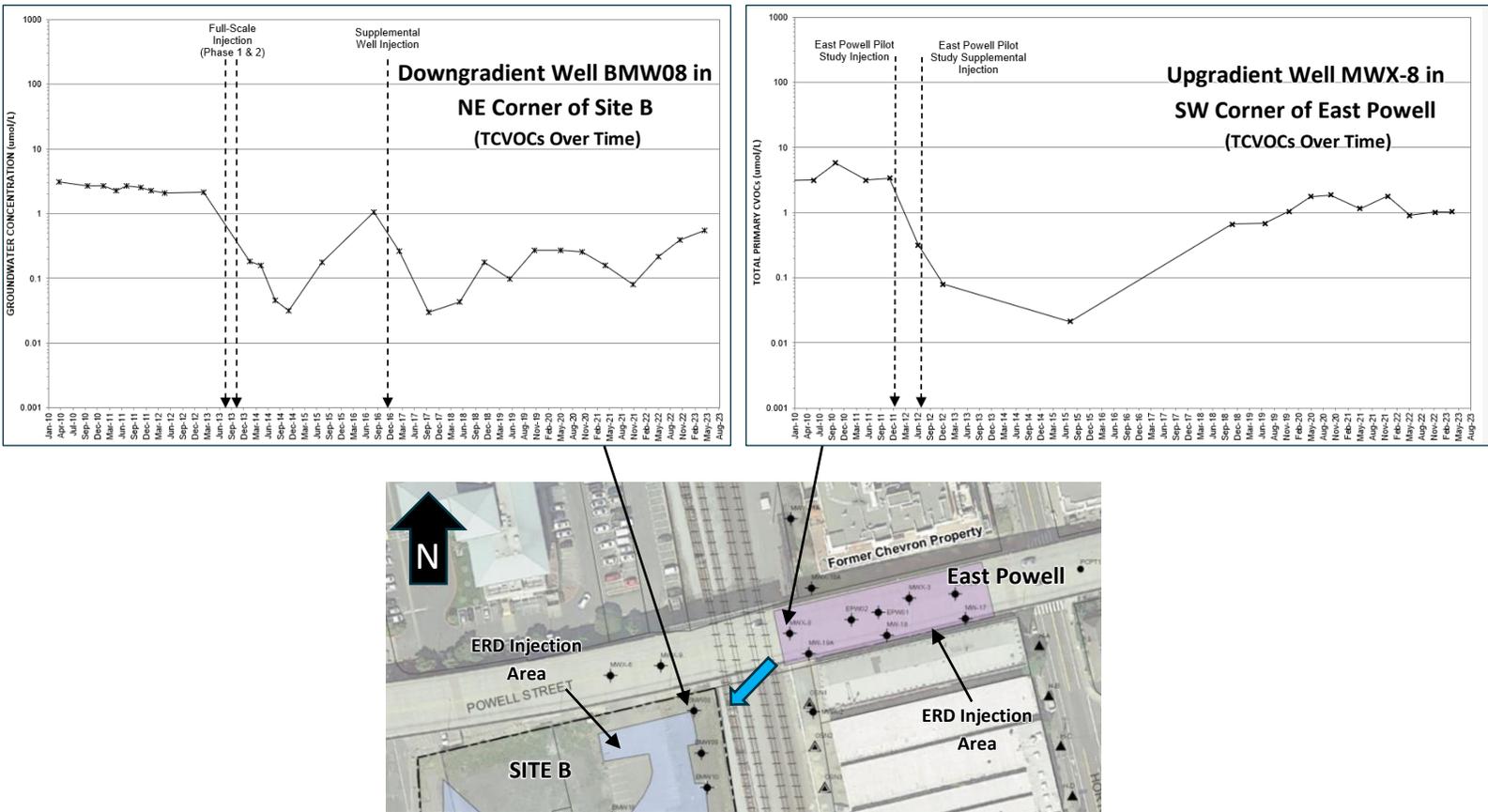
**Figure 2: Historical Maximum Groundwater Concentrations for TCE in Shallow Groundwater**  
Chemical Migration Pathways (blue arrows). Figure 3-1a.1 adapted from EKI, 2016.

Several rounds of in-situ bioremediation injections, specifically enhanced reductive dechlorination (ERD) injections, were implemented at East Powell by the Successor Agency in 2011/2012 in accordance with DTSC approved work plans.

- In December 2011, a pilot study was implemented at East Powell as described in the *Final Work Plan for Groundwater Pilot Study at East Powell* (East Powell Work Plan; [EKI, 2011]). Approximately 20,000 gallons of emulsified vegetable oil (EVO) with buffer was injected at twenty-two locations [EKI, 2013b].
- In July and August 2012, injection of additional amendments (e.g., EVO, buffer, and augmentation with Dehalococoides) at East Powell was conducted in accordance with methods and procedures outlined in the East Powell Work Plan and subsequent submissions to DTSC as described in the Final Pilot Study Report for East Powell Groundwater (East Powell's Final Pilot Study Report; [EKI, 2013b]).

Thereafter, as approved by DTSC and consistent with in-situ ERD at Site B, monitored natural attenuation (MNA) has occurred at East Powell to further document the effectiveness of ERD [EKI, 2013a]. After completion of East Powell injection activities in 2012, CVOC concentrations in groundwater at East Powell declined by up to two orders of magnitude and remained relatively low for several years. Since 2018, however, total primary CVOC (hereafter defined as "TCVOC") concentrations have been steadily increasing in wells located on the downgradient (west) side of East Powell.

After more than 11 years of post-injection groundwater monitoring and data evaluation at East Powell, it is clear that the observed increases in TCVOC concentrations in shallow groundwater on the northeast portion of Site B are reflective of increased TCVOC concentrations in East Powell. This relationship is illustrated below in figures showing concentrations of TCVOCs over time in downgradient wells BMW08 and MWX-8. BMW08 is located in the northeast corner of Site B, and upgradient well MWX-8 is located in the southwest corner of East Powell (see Figure 3 below). BMW08 is a Site B monitoring well installed by EKI for the Successor Agency. MWX-8 is a Former Chevron Property monitoring well installed by consultants engaged by Chevron and located in East Powell.



**Figure 3: TCVOCs in Shallow Groundwater in Downgradient Well BMW08 (on the left) and Upgradient Well MWX-8 (on the right).  
 Chemical Migration Pathway (blue arrow)**

Prior to ERD injections at East Powell and Site B, concentrations of TCVOCs in shallow groundwater were higher in upgradient well MWX-8 compared to downgradient well BMW08. The graphs presented in Figure 3 are on a logarithmic scale, therefore small changes may not seem significant at first glance, however, each gray line of the y-axis represents an increase/decrease in concentrations by a factor of 10. As shown in the MXW-8 graph (Figure 3), ERD amendments injected in groundwater at East Powell in 2011 and 2012 greatly reduced concentrations of TCVOCs. Likewise, ERD injections on Site B in the vicinity of BMW08 in 2011 and 2016 reduced TCVOC concentrations. Since 2018, concentrations of TCVOCs have steadily increased at upgradient well MWX-8, which has been reflected in increasing concentrations of TCVOCs at downgradient well BMW08 on Site B. Concentrations of TCVOCs at upgradient well MWX-8 continue to be higher than at downgradient well BMW08.

## **RESPONSE TO ARCADIS MISSTATEMENTS OF FACT IN FOURTH CLOSURE REQUEST [ARCADIS, 2023B]**

This section provides corrections to misstatements of fact in Chevron’s Fourth Closure Request report prepared by Arcadis [2023b]. Arcadis statements are listed in italic font and EKI comments are bulleted and follow each Arcadis statement.

Arcadis Statement, Section 2.2 - Offsite Cases, Subsection 2.2.2 Horton Industrial Area: “[...] *In addition, EKI completed a pilot test in 2011 in the Powell Street (Figure 2) to evaluate enhanced reductive dichlorination via emulsified vegetable oil (EVO) as a remedy. Results indicate that this would be an effective remedial option. EKI has completed several subsequent injections and continues to monitor the progress of remediation of groundwater in the Powell Street area under the supervision of the DTSC.*”

- **EKI Comment #1:** As shown above on Figure 1, the Horton Industrial Area and East Powell are two different sites. EKI has conducted only investigation work regarding the Horton Industrial Area, and those data are reported in FMW’s Remedial Investigation Report [EKI, 2016]. EKI has not done any remediation work at or in connection with the Horton Industrial Area; nor is any such work presently anticipated. On behalf of the Successor Agency, EKI conducted an ERD pilot test in 2011 at East Powell [EKI, 2013b], which is only a portion of the Powell Street Area (Figure 1). As approved by DTSC, no further action at East Powell other than MNA is required of the Successor Agency and EKI continues to monitor 3 off-site wells at East Powell (EPW01, EPW02, and EPW04) as part of the Site B groundwater monitoring program on a semiannual basis.

Arcadis Statement, Section 3 - Conceptual Site Model, Subsection 3.3.4.2 Groundwater: “*As mentioned in Section 2.2 [Offsite Cases], there are significant off-site sources affecting groundwater at the (Former Chevron Property) Site and the Powell Street area. In addition, EKI is remediating groundwater in the Powell Street area using enhanced reductive dichlorination via EVO, which is likely influencing the CVOC concentrations observed in off-site wells.*”

- **EKI Comment #2:**
  - (a) There are no documented source areas likely to affect shallow groundwater at East Powell other than historic operations at the Former Chevron Property. Residual mass (i.e., left in place during soil excavations between 1989 and 1999) associated with historic operations at the Former Chevron Property remains along the southwestern and southern edge of the Former Chevron Property, behind the former office building and asphalt testing laboratory [Arcadis, 2012], and is co-located with remaining CVOC impacted shallow groundwater [Arcadis, 2023b]. Furthermore, based on the pre-injection distribution of TCE in shallow groundwater presented on Figure 2 and the observed southwesterly hydraulic gradient, there are no identified upgradient source areas affecting the Former Chevron Property.
  - (b) As approved by DTSC and documented in East Powell’s Final Pilot Study Report and Site B’s 2013 RAP Amendment, after completion of the 2011/2012 injection activities, no further action at East Powell other than MNA is required of the Successor Agency [EKI, 2013a; EKI, 2013b]. The potential need for remediation of residual CVOC mass associated with upgradient sources was addressed in the 2013 Site’s B RAP Amendment as follows, “Although no further actions other than MNA are anticipated for East Powell, injection of additional amendments or other additional remedial actions may be conducted by others as part of remediation of upgradient sources by other parties if CVOC concentrations increase significantly [EKI, 2013a].” Furthermore, as concluded in East Powell’s Final Pilot Study

Report, “the long-term effectiveness of ERD injections conducted at East Powell is contingent on addressing continuing off-site sources at the Former Chevron Property. [EKI, 2013b]”

Arcadis Statement, Section 5 - Summary of Findings to Support Closure, Part 2b: “[...] *Off-site groundwater plumes from the former Merchant/Whitney (sic), Horton Industrial Area, and the UPRR diesel release are impacting the Powell Street area and the (Former Chevron Property) Site.*”

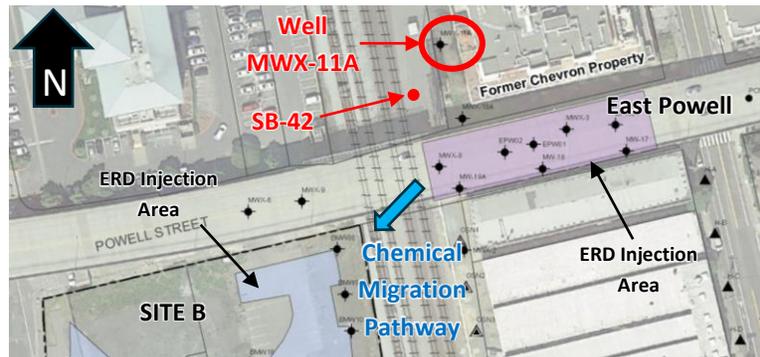
- EKI Comment #3:
  - (a) The only documented source of CVOCs impacting shallow groundwater on the Former Chevron Property and in the Powell Street Area (including East Powell) are the historic operations at the Former Chevron Property. See EKI Comment #2a.
  - (b) The FMW Site is not impacting East Powell, the Powell Street Area, or the Former Chevron Property. The Arcadis assertion is not supported by groundwater gradient directions or the distribution of CVOCs in shallow groundwater (S10 unit), as summarized in the *Final Feasibility Study and Remedial Action Plan (FS/RAP)* [see Figure 2 above; and Section 2.2 of EKI, 2023 for discussion of FMW’s Site conceptual model] and further illustrated on historical EKI figures presented by Arcadis in a presentation to ACDEH on 31 January 2023 [Arcadis, 2023a] which originate from FMW’s Final RI Report [EKI, 2016]. The FMW Site is also located cross-gradient of the Former Chevron Property and approximately 400 feet away.

Arcadis Statement, Section 5 - Summary of Findings to Support Closure, Part 2c: “[...] *In addition, off-site groundwater is being remediated by EKI in the Powell Street area, where elevated COPC concentrations exceeding ESLs are observed.*”

- EKI Comment #4: Other than MNA, EKI, on behalf of the Successor Agency, has finished its groundwater remediation work at Powell Street. See EKI Comment #2b.

Arcadis Statement, Section 5 - Summary of Findings to Support Closure, Part 3a: “*In general, the on-site groundwater plume is stable to decreasing. There was an increase in TCE concentration in well MWX-11A during the April 2023 sampling event, which is likely due to a significant increase in water levels (up to 2 feet) and off-site sources. EKI is remediating off-site groundwater.*”

- EKI Comment #5:
  - (a) Fluctuations in TCE concentrations at well MWX-11A are not due to off-site sources. Well MWX-11A is located within the Former Chevron Property and is located upgradient of East Powell and other areas shown below on Figure 4. Thus, residual mass on the southwest/south portion of the Former Chevron Property, which extends off-site onto the UPRR property (see SB-42 on Figure 4 below), is the only documented explanation. See EKI Comment #2a.
  - (b) Other than MNA, EKI, on behalf of the Successor Agency, has finished its groundwater remediation work at Powell Street. See EKI Comment #2b.



**Figure 4. Location of well MWX-11A on the Former Chevron Property and location of off-site boring SB-42 (max TCE in soil).**

Arcadis Statement, Section 5 - Summary of Findings to Support Closure, Part 3b: *“Groundwater monitoring results from the April 2023 event indicate that COPC (constituent of potential concern) concentrations above the applicable ESLs in on-site wells were present in only in (sic) samples collected from MWX-10A and MWX-11A. Off-site groundwater remediation conducted by EKI will continue to degrade COPCs in this area, and concentrations are expected to decrease below ESLs in the future.”*

- EKI Comment #6:
  - (a) There is no such ongoing EKI remediation. Other than MNA, EKI, on behalf of the Successor Agency, has finished its groundwater remediation work at Powell Street. See EKI Comment #2b.
  - (b) The available data indicate CVOC concentrations will not continue to degrade due to residual mass at the Former Chevron Property.

Arcadis Statement, Section 5 - Summary of Findings to Support Closure, Part 3c: *“[...] EKI is currently conducting site remediation and monitoring site conditions under the supervision of the DTSC for the former Merchant/Whitney (sic) site, Horton Industrial Area, and Site B. As part of the remedial activities, EKI is also completing groundwater remediation within the Powell Street area.”*

- EKI Comment #7:
  - (a) Except for the southern-most portion of Horton Industrial Area that is being addressed as part of the FMW site, EKI is not remediating or conducting ongoing monitoring for the Horton Industrial Area. In accordance with a DTSC approved work plan, EKI only conducted an off-site investigation of the Horton Industrial Area and collected grab groundwater samples and groundwater from wells belonging to the neighboring property owner via an access agreement. Results of groundwater samples collected from the Horton Industrial Area are provided in FMW’s RI Report [EKI, 2016].
  - (b) Other than MNA, EKI, on behalf of the Successor Agency, has finished its groundwater remediation work at Powell Street. See EKI Comment #2b.

Arcadis Statement, Section - 6 Conclusions and Recommendations: *“Remaining groundwater impacts are limited to the southwest portion of the (Former Chevron Property) Site in Powell Street. Off-site groundwater plumes are impacting the (Former Chevron Property) Site and Powell Street. The City of Emeryville, through their consultant EKI, are remediating off-site groundwater in Powell Street and surrounding area.”*

- EKI Comment #8:
  - (a) Remaining groundwater impacts on the southwest portion of the Former Chevron Property, are associated with operations conducted in the former laboratory/office building area where asphalt testing and research were reportedly conducted. Excavations have been conducted to remediate contaminated soil and to construct a parking garage and the data indicate that residual mass (i.e., left in place during soil excavations between 1989 and 1999) associated with historic operations at the Former Chevron Property remains along the southwestern and southern edge of the property behind the former office building and asphalt testing laboratory [Arcadis, 2012] and is collocated with remaining CVOC impacted shallow groundwater [Arcadis, 2023b].
  - (b) The only documented source of CVOCs impacting shallow groundwater on the Former Chevron Property and in the Powell Street Area (including East Powell) are the historic operations at the Former Chevron Property. See EKI Comment #2a and Figure 2 above.
  - (c) The City of Emeryville is a separate and distinct legal entity from the Successor Agency and has no obligation or responsibility for, and is not performing, any remediation work in connection with Powell Street, Site B, FMW Site, Horton Industrial Area or any other sites or locations discussed in or referenced in Chevron’s request for closure.
  - (d) Other than MNA, EKI, on behalf of the Successor Agency, has finished its groundwater remediation work at Powell Street. See EKI Comment #2b.

#### **RESPONSE TO ACDEH MISSTATEMENT OF FACT**

This section provides a correction to a misstatement of fact in ACDEH’s case closure public notification letter [ACDEH, 2024]. The ACDEH statement is listed in italic font and the EKI comment is bulleted and follows the ACDEH statement.

ACDEH Statement, Section 1 – Comments: *“At the time of Case closure notification, the Site was evaluated to the current land use as a vacant lot.”*

- EKI Comment #9: The current land use of the Former Chevron Property is not a vacant lot. As described in Chevron’s Fourth Closure Request and confirmed by EKI in a site visit on 8 March 2024, “an Amtrak Station [also known as Emeryville station] currently occupies the northern portion of the Site, and a condominium complex with parking structure [also known as The Terraces at Emeryville Station] occupies the southern portion of the Site [Arcadis, 2023b].”

Another minor clarification is the subject line of ACDEH’s [2024] case closure notification letter lists the incorrect Geotracker Global ID for the Former Chevron Property; the correct Geotracker Global ID is SLT2007076, as listed on the Geotracker website, and the hyperlink is provided above in the first section of this memorandum.

## RECOMMENDATION TO DECLINE INHERITING CHEVRON WELLS

EKI recommends the Successor Agency decline Arcadis' offer to inherit the Chevron wells [Arcadis, 2023c]. The three wells installed by the Successor Agency which are currently monitored are sufficient.

### References

- ACDEH, 2024. *Case Closure Public Notification, Site Cleanup Program (SCP) Case No. RO0002535, GeoTracker Global ID T10000006142, Chevron # 20-6265, 1520 Powell Street, Emeryville, CA 94608*, 15 February 2024.
- Arcadis, 2012. *Conceptual Site Model and Closure Request, Former Chevron Asphalt Plant Terminal #20-6265, 1520 Powell Street, Emeryville, California*, December 2012.
- Arcadis, 2023a. *Conceptual Site Model, Former Chevron Asphalt Plant and Bulk Terminal, 1520 Powell Street, Emeryville, California*, presented to ACDEH on 31 January 2023.  
[https://geotracker.waterboards.ca.gov/getfile?filename=/regulators%2Fdeliverable\\_documents%2F7013883292%2FPower%20point%20presentation.pdf](https://geotracker.waterboards.ca.gov/getfile?filename=/regulators%2Fdeliverable_documents%2F7013883292%2FPower%20point%20presentation.pdf)
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- Arcadis, 2023c. Email communication from Steven Osborn (Arcadis PM) to Earl James and Joy Su (EKI PM's), *Subject: Chevron 206265 Emeryville (1520 Powell Street) - Closure Activities and Well Abandonments*, 20 February 2024.
- Cambria, 2006. *Site Conceptual Model and Request for Site Closure, Former Chevron Asphalt Plant and Terminal #20-6265, 1520 Powell Street, Emeryville, California*, 23 March 2006.
- EKI, 2008. *Final Feasibility Study and Remedial Action Plan, Site B Project Area, Emeryville California*, March 2008.
- EKI, 2011. *Final Work Plan for Groundwater Pilot Study at East Powell, Site B Project Area, Emeryville, California*, October 2011.
- EKI, 2013a. *Final Remedial Action Plan Amendment and Remedial Design and Implementation Plan for Shallow Groundwater, Site B Project Area, Emeryville, California*, June 2013.
- EKI, 2013b. *Final Pilot Study Report for East Powell Groundwater, Site B Project Area, Emeryville, California*, June 2013.
- EKI, 2015. *Phase I Environmental Site Assessment, Horton District, Emeryville, California*, January 2015.
- EKI, 2016. *Final Remedial Investigation Report, 5679 Horton Street, Former Marchant/Whitney Site, Emeryville, California*, June 2016.

EKI, 2023. *Final Feasibility Study/Remedial Action Plan (FS/RAP), Former Marchant/Whitney Site, 5679 Horton Street, Emeryville, California, 12 April 2023.*

WGR, 1990. *Site Closure Plan, Abandoned Chevron Asphalt Plant, 1520 Powell Street, Emeryville, California, June 1990.*