CITY OF OAKLAND

AGENDA REPORT

TO:	Edward D. Reiskin City Administrator	**FROM:**	William A. Gilchrist Director, Planning & Building Department
SUBJECT:	**SUPPLEMENTAL -** Appeal of 1396 5th Street Project	**DATE:**	June 22, 2022

City Administrator Approval Date: Jul 7, 2022

RECOMMENDATION

Staff Recommends That The City Council Conduct A Public Hearing And Upon Conclusion Adopt A Resolution Denying The Appeal By East Bay Residents For Responsible Development And Thus Upholding The Planning Commission's Environmental Determination And Approval Of A Proposal To Construct 222 Dwelling Units On The Existing Vacant Lot Located At 1396 5th Street, Oakland CA (Project Case No. PLN20-101).

REASON FOR SUPPLEMENTAL

The Planning & Building Department (PBD) is submitting this supplemental report for the "Appeal of 1396 5th Street Project" item to summarize the actions taken and direction provided by the City Council on this item at the prior September 21, 2021 and April 19, 2022 City Council public hearings, and to summarize the actions and information gathered subsequently.

The City Council first heard this appeal, filed by East Bay Residents for Responsible Development, of the Planning Commission approval of the housing project located at 1396 5th Street (Project) during a public hearing at the September 21, 2021 meeting. When the item came before the City Council, staff had provided a recommendation for a resolution to deny the appeal and uphold the Planning Commission approval. However, as requested by City Council, staff had provided two alternative options, one of which was *"3) A Motion To Direct Staff To Prepare A Resolution For Future City Consideration To Uphold The Appeal."*

During the September 21, 2021 hearing, the City Council expressed concerns over the characterization of the hazard conditions at the Project site. At the conclusion of the public hearing, the City Council voted to direct staff to return to a future City Council meeting with a resolution for consideration to uphold the appeal on the basis that the California Environmental Quality Act (CEQA) analysis prepared for the Project inadequately described the current status of soil and ground water hazards conditions, did not adequately compare the current status with the analysis conducted under the West Oakland Specific Plan (WOSP) Environmental Impact

Report (EIR), and did not address whether any additional mitigation measures would be necessary. It was also recommended that a supplemental or infill EIR may be the more appropriate path forward for the CEQA review for the project.

Given that the City Council motion strongly indicated an intent for additional information to come back to the City Council, staff drafted a variation of the previous option three that was presented for City Council consideration at the April 19, 2022 public hearing. That proposed resolution continued the appeal and directed the preparation of additional analysis to be presented to the City Council responsive to the concerns regarding hazards and hazardous materials that were raised at the September 21, 2021 hearing, rather than vacating the approval and remanding back to the Planning Commission or requiring the preparation of a supplemental or infill EIR without supporting evidence in the record.

Resolution No. 89140 CMS was adopted by the City Council, and the item was continued to a future City Council public hearing for staff to return with the additional analysis and a recommendation as to whether the Project will have one or more significant effects not described in the WOSP EIR that would require preparation of an additional EIR, such as a supplemental EIR under CEQA Guidelines Sections 15163, 15182, and 15183, and/or an infill EIR under CEQA Guidelines Section 15183.3, as determined appropriate based on the additional information reviewed and analyzed.

Additional CEQA Analysis

Following the April 19, 2022 City Council hearing, staff worked with the City's environmental consultant as directed to provide additional information regarding the hazards conditions on the project site. The consultant has provided a memorandum with a summary of their findings (**Attachment A**) and has prepared a revision to the CEQA Analysis document that was prepared for the City. The revised CEQA Analysis document may viewed in its entirety on the City website at: https://www.oaklandca.gov/resources/current-environmental-review-ceqa-eir-documents-2011-2022. The updated Hazards and Hazardous Materials chapter has been provided as an attachment to this report (**Attachment B**).

The revised CEQA Analysis more fully describes the historical industrial use of the property and fully characterizes the historic soil, groundwater, and soil vapor contamination issues that exist on the project site as well as the remediation efforts that commenced in 2000 and have been ongoing. The update to the CEQA Analysis document also provides a more thorough description of the necessary and legally required process that the project applicant must undertake with the Alameda Department of Environmental Health (ACDEH), which is the responsible agency with jurisdiction for this site with regard to the matter of development of a residential building on a site that contains historic hazards conditions.

While staff encourage interested members of the public and decisionmakers to review the additional analysis provided in the attachments, staff provide the following summary based on the City's environmental consultant's review of the site history and current conditions:

Alameda County Oversight: The WOSP EIR and the City's Standard Condition of Approval (SCAs) require that any project located on a site that contains hazardous materials must go through the legally required process with the responsible agency that has jurisdiction over the

site and obtain approvals prior to performing any construction activities for the project. In this instance the agency with jurisdiction is ACDEH. In September of 2021, ACDEH had provided the applicant in writing that, *"ACDEH is of the opinion that any potential risk from subsurface contamination to construction workers, the adjacent community, and Site users can be mitigated during redevelopment activities and long-term use of the Site through implementation of appropriate soil and groundwater management practices and/or use of engineering controls such as vapor migration and mitigation systems and/or capping of impacted soil beneath hardscape and foundations".*

ACDEH advised the applicant to submit a Voluntary Remediation Action Agreement (VRAA), which was subsequently filed and recently executed. The applicant's engineer has proposed that a Soil Management Plan be prepared for review and approval by ACDEH to manage treatment and disposal of any contaminated soils during construction activities, as well as proposing a Vapor Intrusion Mitigation System (VIMS or vapor barrier) to address any vapor intrusion concerns. ACDEH will also review the vapor barrier proposal as part of the process and if required, will monitor its installation through the construction process. ACDEH has since responded to the applicant's submittal under the VRAA and has issued a letter dated July 5, 2022 (**Attachment C**), which provides conditional approval based upon the proposed measures. The measures being proposed are typical of redevelopment of properties in Oakland with commercial and industrial histories, and the review and approval of the final measures by the responsible agency with jurisdiction generally occurs after approval of the project entitlements by the City but prior to issuance of construction permits. Review by the responsible agency is also ongoing during implementation and monitored throughout the site preparation and building construction stages.

Soil Contamination: The potential for significant residual contamination in soil at the project site is low based on prior remediation work and confirmation sampling. Nonetheless, the applicant's engineer recommended that a soil management plan be prepared and implemented for the project site to ensure that any potentially contaminated soil that may be encountered during construction would be appropriately managed. In accordance with City of Oakland SCAs, best management practices would be implemented by the contractor during construction to minimize potential soil and groundwater hazards. ACDEH oversight of the soil management plan preparation and implementation would ensure that potentially contaminated soil would be managed in a manner that would protect human health and the environment.

Groundwater Contamination: The need to properly manage groundwater contaminated by petroleum hydrocarbons and volatile organic compounds during construction is a common issue in the City of Oakland and would be adequately addressed by existing regulations and compliance with the City's SCAs, which require a Health and Safety Plan to ensure the protection of construction workers from hazardous materials releases and implementation of construction best management practices. Groundwater below the site continues to be contaminated, likely from an off-site source, but is only a human health risk if used for drinking water. Oversight from ACDEH would further ensure that contaminated groundwater is appropriately managed during construction.

Soil Vapor Contamination: The presence of soil vapor contamination is also a very common issue in the City and can be adequately addressed through the design, installation, operation, and maintenance of a vapor intrusion mitigation system (VIMS). A detailed design of the VIMS

would be prepared as part of the implementation of City of Oakland SCAs, which require that the remedial recommendations of the 2022 Phase II Report, including installation of a vapor barrier, would be performed under the oversight of ACDEH. Oversight from ACDEH would ensure that the design, installation, operation, and maintenance of a VIMS for the project site would be performed in a manner that would protect future site users from soil vapor intrusion.

Comparison to the WOSP EIR: The WOSP EIR indicated that potential impacts from hazardous materials release sites would be mitigated to less-than-significant levels with compliance with local, state, and federal regulations for treatment, remediation, and/or disposal of contaminated soil and/or groundwater and the City SCAs that were in effect at the time. While some investigation and remedial actions are ongoing, adherence to and demonstration of compliance with City SCAs would ensure that the project site would be adequate for residential development prior to demolition, grading, and/or building permit issuance. Consistent with the findings of the WOSP EIR, compliance with existing hazardous materials regulations and the City's current SCAs discussed above would reduce potential impacts of the project related to contamination from hazardous materials release sites to a less-than-significant level.

Since the time the WOSP EIR was prepared (May 2014), there have been no activities at the project site or at nearby upgradient properties that would increase potential hazardous materials contamination at the project site. New information regarding soil, groundwater, and soil vapor conditions at the project site has become available since the preparation of the WOSP EIR due to additional sampling activities performed at the project site under the oversight of ACDEH. The new information has confirmed that soil contamination conditions at the project site have significantly improved due to the implementation of the previous Remedial Action Plan, as only one minor exceedance of current residential Environmental Screening Levels (except for arsenic, which is within the naturally occurring background range) was identified by the investigation activities performed in 2016 and 2021-2022.

Conclusion: Soil contamination, groundwater contamination, and soil vapor contamination at project site do not contain any additional hazardous materials that would characterize the site as involving a substantial increase in the severity of previously identified significant effects at the time of the preparation of the WOSP EIR, nor does the site contain any conditions that cannot be addressed by the City's SCAs regarding hazardous materials. Given that the additional information provided does not alter the requirements necessary for the project to proceed, and all hazardous materials concerns were previously addressed in the WOSP EIR as well as by the City's SCAs, staff concludes that the requirement for any supplemental and/or infill EIR would be inappropriate and not justified. Specifically, CEQA Guidelines Section 15183.3(d)(2)(C) [Infill EIR] states that such a new EIR may only be required *"If the infill project would result in new specific effects or have more significant effects* [than the prior EIR]*, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA.*

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends that the City Council conduct a public hearing and, upon conclusion, adopt a Resolution denying the appeal by East Bay Residents for Responsible Development and upholding the Planning Commission's environmental determination and approval of a proposal

to construct 222 dwelling units located at 1396 5th Street, Oakland CA (Project Case No. PLN20-101), based on the findings contained in the City Council agenda report, the CEQA Analysis prepared for the project, and record before the City of Oakland Planning Commission.

For questions regarding this report, please contact Peterson Vollmann, Planner IV, at (510) 238-6167.

Respectfully submitted,

WILLIAM A. GILCHRIST
Director, Planning & Building Department

Reviewed by: Catherine Payne
Acting Development Planning Manager
Bureau of Planning

Edward Manasse
Deputy Director/City Planner
Bureau of Planning

Prepared by:
Peterson Vollmann, Planner IV
Bureau of Planning

Attachments (3):

A. June 21, 2022 Memo from Urban Planning Partners
B. Revised 1396 5th Street CEQA Analysis (Hazardous Materials Section)
C. Letter from ACDEH dated July 5, 2022

URBAN PLANNING PARTNERS INC.
388 17TH STREET
SUITE 230
OAKLAND, CA 94612
510.251.8210
WWW.UP-PARTNERS.COM

Memorandum

DATE	June 21, 2022		
TO	Peterson Vollmann, Planner IV 510.238.6167 pvollmann@oaklandca.gov cc: Michael Branson, City of Oakland	FROM	Lynette Dias, Principal-in-Charge Brandon Northart, Senior Planner

RE: 1396 5th Street: Additional Hazardous Materials Investigation

Dear Pete:

Based on direction received by Oakland City Council and Oakland Planning Staff, Urban Planning Partners and Baseline Environmental Consulting reviewed all available documentation related to previous environmental investigations, cleanup activities, historic land uses, and findings from previous reports with the intent to determine if additional CEQA analysis is required beyond what has already been prepared.

To adequately address this concern, we have identified five key questions and have provided the following brief responses below. Please note, the information provided in this memo is intended to be a brief summary. As described below, we have provided an extremely detailed analysis of everything described in this memo in the updated CEQA document.

1. ***Determine if the environmental hazards located at the 1396 5th Street project site in West Oakland are worse now, compared to when they were identified in the West Oakland Specific Plan (WOSP) Environmental Impact Report (EIR) in 2014.***

   Previous reports have identified contamination at the project site, which was a known condition present at the time the WOSP EIR was prepared. Since the WOSP EIR was prepared there have been no activities at the project site or at nearby upgradient properties that would increase potential hazardous materials contamination at the project site. Since release of the WOSP EIR, additional sampling activities at the project site under the oversight of the Alameda County Department of Environmental Health (ACDEH) confirmed that contamination at the site is still present; however, the residual soil contamination appears to be minor and groundwater conditions have improved since then. Therefore, the environmental conditions at the project

site are the same, if not improved, since the public circulation and certification of the WOSP EIR.

2. ***Determine if the proposed project would result in any new or more severe impacts from what was identified in the WOSP EIR related to hazardous materials.***

   The WOSP EIR indicated that potential impacts from hazardous materials release sites would be mitigated to less-than-significant levels with compliance with local, state, and federal regulations for treatment, remediation, and/or disposal of contaminated soil and/or groundwater and the City Standard Conditions of Approval (SCAs) that were in effect at the time, which are functionally equivalent to the City's current SCAs.

   Based on review of past and present documentation, the project's compliance with applicable regulations and SCA-HAZ-1: Hazardous Materials Related to Construction (#43) and SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44) would still ensure that the site would be safe for residential development and its potential impact be reduced to a less-than-significant level, as was the case when the WOSP EIR was approved (SCA-HAZ-1 requires the project applicant to ensure that Best Management Practices [BMPs] are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health and SCA-HAZ-2 includes measures such as compliance with all required treatment, remediation, and disposal requirements from applicable agencies; a Health and Safety Plan to ensure the protection of construction workers from hazardous materials releases; and implementation of construction BMPs). Permits for demolition, grading, and/or building permits cannot be issued until complete compliance with these SCAs, and therefore any remedial activities, is demonstrated. These findings demonstrate that the proposed project is consistent with the original findings of the WOSP EIR.

3. ***Determine if compliance with existing regulatory requirements and City of Oakland SCAs would adequately address any potential impacts related to hazardous materials.***

   As mentioned above, the project's compliance with applicable regulations and SCA-HAZ-1: Hazardous Materials Related to Construction (#43) and SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44) would still ensure that the site would be safe for residential development and its potential impact be reduced to a less-than-significant level. While some investigation and remedial actions are ongoing, adherence to and demonstration of compliance with these SCAs would ensure that the project site would be adequate for residential development prior to demolition, grading, and/or building permit issuance.

4. ***Determine the appropriate level of CEQA documentation based on any new findings and analysis.***

   If it was determined that the conditions at the site had worsened since adoption of the WOSP EIR, additional analysis would be required to account for any unforeseen changes not considered in the WOSP EIR's analysis.

Based on our findings, conditions at the project site remain similar (only improved) since the WOSP EIR was adopted. As such, it is our professional opinion that the project still meets the conditions for an Addendum to the WOSP EIR pursuant to CEQA Guidelines Section 15162, 15164, 15168, 15182, and 15183, and Infill Exemption pursuant to CEQA Guidelines Section 15183.3. No further CEQA documentation is required. As such, we've prepared an updated CEQA analysis which includes substantial modifications and additions to the Hazards and Hazardous Materials resource topic to address concerns #1-4 in extensive detail. Furthermore, we've also included a several new sources into the CEQA analysis citing the applicable hazardous materials reports, studies, and miscellaneous materials used to inform the additional analysis. These reports have been added to the administrative record.

5. ***Provide current status related to ACDEH process and ensure adequate public outreach will been undertaken related to hazardous materials.***

In May 2021, the property owner submitted a service request application to ACDEH for preliminary site review. In July 2021, an Environmental Update Letter was prepared for the project site to describe potential environmental concerns that remained after previous investigations and removals; compare past investigation results with current screening levels; and describe the potential contaminant locations in relation to the proposed future development. The Environmental Update Letter indicated that the presence of some residual soil and groundwater contaminants would require health and safety measures in areas of ground disturbance, and recommended that a Soil Management Plan be developed in coordination with the ACDEH, and that a vapor barrier should be installed under the building slab to mitigate the potential for vapor intrusion. In August 2021, ACDEH Issued a Phase I/II Screening Determination which indicated that ACDEH had reviewed the July 2021 Environmental Update Letter and information available on GeoTracker for the project site, and that ACDEH had determined that further investigation of the environmental concerns at the project site was warranted.

In September 2021, ACDEH issued an Environmental Site Review for the project site indicating that <u>any potential risk from subsurface contamination to construction workers, the adjacent community, and project site users could be mitigated during redevelopment activities and long-term use of the project site through risk reduction measures</u>. Risk reduction measures could include implementation of appropriate soil and groundwater management practices, use of engineering controls such as vapor migration and mitigation systems, and/or capping of impacted soil beneath hardscape and foundations – all of which are not out of the ordinary and would be typical for a site such as this one. ACDEH also requested that the Applicant enter into a Voluntary Remedial Action Agreement (Voluntary Agreement) with ACDEH to provide oversight of additional investigation activities to fill remaining data gaps to characterize soil and soil vapor at the project site and development of soil and groundwater management plans and engineering control documents to be implemented during development if warranted based on the additional data collection.

In March 2022, a Phase II Subsurface Investigation Report (Phase II Report) was prepared to document investigation activities performed at the project site between November 2021 and February 2022. The investigation activities were performed in general accordance with a Phase II Subsurface Investigation Work Plan that was reviewed and approved by ACDEH. Based on findings of testing at the site, the Phase II Report recommended risk reduction measures including preparation and implementation of a Soil Management Plan and installation of a vapor barrier. The Phase II Report also requested closure for the project site to allow residential occupancy; however, closure of a site is typically only allowed by regulatory agencies after ensuring that all necessary actions to protect human health and the environment have been completed and documented. The Phase II Report has been submitted to ACDEH for review; however, as of writing this memo, ACDEH has not yet issued a response to the Phase II Report.

In June 2022, as requested by ACDEH, the Applicant entered into a Voluntary Agreement for the project site. The Voluntary Agreement requires that the Applicant perform all remedial actions and other activities requested by ACDEH and indicates that upon completion of site assessment and/or remedial action, ACDEH will provide a letter indicating that no further action is required (i.e., Closure Letter) for the project site. The ACDEH would issue a No Further Remedial Action Letter when these actions are completed and a Risk Management Plan is prepared by the project applicant and approved by ACDEH. The Risk Management Plan must include a maintenance/monitoring/reporting program to confirm ongoing performance of the engineering controls and risk management measures until such time that subsurface contamination no longer poses a risk to human health if the engineering controls were not in place. The Risk Management Plan must also include routine inspection and testing to confirm the engineering controls continue to be protective of human health and the environment. This would ensure that cleanup efforts completed prior to construction of the project remain successful over time. SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), requires compliance with all required treatment, remediation, and disposal requirements from applicable agencies – risk reduction and cleanup measures required from the ACDEH Voluntary Agreement and development of a Risk Management Plan would be consistent with implementation of this SCA to ensure no significant impacts would occur.

Furthermore, the ACDEH oversight process for remedial actions includes a public participation process that includes sending a fact sheet to the nearby community and making plans for remedial actions available for a 30-day public review and comment period. This public participation process would ensure that any concerns from the public regarding proposed remedial actions would be considered and responded to prior to a final determination on the proposed remedial actions.

After having reviewed all available information, we have determined that the current level of CEQA review is appropriate and that no additional CEQA analysis and/or documentation is required. The evidence provided here supports that the existing CEQA document, with a supplemented hazards and hazardous materials evaluation, is sufficient for the purposes of CEQA compliance.

G. HAZARDS AND HAZARDOUS MATERIALS

Impacts Related To:	WOSP EIR Findings	PROJECT				
		Relationship to WOSP EIR Findings		Applicable		Project Level of Significance
		Equal or Less Severity	Substantial Increase in Severity	MMs	SCAs	
a. Hazardous Materials Use, Exposure, Storage & Disposal (Impact Haz-1, Haz-2, Haz-3)	LTS w/ SCAs	☒	☐	--	SCA Hazardous Materials Related to Construction (#43) SCA Hazardous Building Materials and Site Contamination (#44) SCA Hazardous Materials Business Plan (#45)	LTS w/ SCAs
b. Hazardous Materials within a ¼-Mile of a School (Impact Haz-4)	LTS w/ SCAs	☒	☐	--	N/A	~~No Impact~~LTS w/ SCAs
c. Airport Hazards (Impact Haz-5)	No Impact	☒	☐	--	N/A	No Impact
d. Emergency Access Routes (Impact Haz-6)	LTS w/ SCAs	☒	☐	--	SCA Fire Safety Phasing Plan (#46) SCA Construction Activity in the Public Right-of-Way (#75)	LTS w/ SCAs
e. Wildland Fires (Impact Haz-7)	No Impact	☒	☐	--	N/A	No Impact

Discussion

The project site is not located near wildland areas (WOSP EIR Impact Haz-7) or public or private airstrips (WOPS EIR Impact Haz-5). The project site does not contain any buildings and therefore does not contain any hazardous materials from buildings (WOPS EIR Impact Haz-2). Therefore, there are no wildland fire risks ~~or,~~ risk of airport hazards, or hazardous building materials risks at the project site and these are not further discussed in this document.

Hazardous Materials Release Sites (Impact Haz-1~~, Haz-2 and Haz-3~~ of the WOSP EIR)

~~The current~~ The WOSP EIR notes that West Oakland was one of the first industrial locations in the San Francisco Bay Area and has been the site of a variety of defense, transportation, and industrial activities. Over the years, many of these uses have relocated or closed and have left behind a legacy of soil and groundwater contamination, which poses a hazard to human health and the environment.

The project site has historically been occupied by various food grade industries including yeast and vinegar production and a brewery from approximately 1900 through 2003. Primary demolition of structures related to those uses occurred from 2003 to 2004. The project site is also the location of a previously proposed and under construction residential development that was lost to arson. In preparation for that development, numerous environmental investigations and soil removal occurred under regulatory oversight from 2004 through approximately 2016. Environmental investigations with regulatory oversight resumed in 2021 as necessary for the currently proposed project.

The project site is not included on the list of hazardous materials release ~~site~~sites compiled pursuant to Government Code Section 65962.5 (the Cortese List).[39] However, the project site is identified as a Cleanup Program Site on the State Water Resources Control ~~Board~~Board's GeoTracker database ~~due to previous potential groundwater contamination. The~~ as a closed case ~~clean up was~~ under the name Red Star Yeast / 1396 Fifth Street LLC[40] and as an open case under the name The Michaels Organization Redevelopment.[41] The closed case largely relates to the remediation work performed to allow for the development of a senior housing development on the project site. However, that development was not completed~~, and the case was closed as of~~

[39] California Environmentla Protection Agncy, 2022. Cortese List Data Resources. Available at: https://calepa.ca.gov/sitecleanup/corteselist/, accessed May 26, 2022.

[40] State Water Resources Control Board, 2022a. GeoTracker Web Page for Red Star Yeast/ 1396 5th Street LLC. Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0601979466g, accessed May 26, 2022.

[41] State Water Resources Control Board, 2022b. GeoTracker Web Page for The Michaels Organization Redevelopment. Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000017095, accessed May 26, 2022.

~~May 10, 2017.~~[42] after a structure fire on June 14, 2012, resulted in complete loss of the under-construction development. The case was closed to allow for the site to remain a vacant parcel. The open case refers to the ongoing work being performed by the current project applicant.

~~The WOSP EIR reported that hazards and hazardous materials impacts~~This section provides a detailed summary of previous environmental investigations and remediation of the project site, followed by a discussion of the condition of the project site at the time of adoption of the WOSP, and ends with a discussion of consistency with the WOSP EIR and summary. The following information regarding previous environmental investigations and remediation of the project site was obtained from documents available on GeoTracker.

2000 Phase I ESA

A Phase I Environmental Site Assessment (ESA) was prepared for the project site in June 2000 (2000 Phase I ESA).[43] A Phase I ESA is a report that compiles research regarding the current and historical uses of a property and surrounding properties with the intent of assessing whether those activities may have resulted in hazardous materials releases that could impact the environmental condition of a property. If conditions indicative of hazardous materials contamination are identified, then the Phase I ESA may include recommendations to prepare a Phase II ESA to collect soil, groundwater, or soil vapor samples as appropriate to assess the presence of contamination.

According to the 2000 Phase I ESA, the project site was initially developed with a manufacturing building in 1880 and the building was expanded over time. A 1902 Sanborn fire insurance map showed an oil underground storage tank (UST) in the west-central portion of the project site; however, this UST was not shown on subsequent maps and personnel at the project site interviewed during preparation of the 2000 Phase I ESA did not believe there was a UST in this area of the project site. The boilers at the project site were fueled by a 3,000-gallon UST until the early 1970s when a 16,000-gallon aboveground storage tank (AST) was installed. The 16,000-gallon AST was removed by 1978, and the 3,000-gallon UST was abandoned in place in 1989 under Alameda County Department of Environmental Health (ACDEH) oversight.

The 2000 Phase I ESA also documents that during a sewer replacement in 1996, mercury was found in soil around a floor drain. The source of the mercury was assumed to be spillage from a manometer. The mercury release was reported to the California Environmental Protection Agency and cleanup of contaminated soil and groundwater was performed. In 1999, petroleum odors were noted in soil during installation of footings in the vicinity of the abandoned-in-place

[42] ~~State Water Resources Control Board GeoTracker. Red Star Yeast/ 1396 5th Street. Available at: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0619794669, accessed August 2020.~~

[43] Environmental Resources Management, Inc. (ERM), 2000. Phase I Environmental Site Assessment of: Red Star Yeast and Prodcuts, A Division of Universal Foods Corporation, 1384 5th Street Oakland, California, 94607, June.

3,000-gallon UST. Soil sampling was performed, and relatively low levels of petroleum hydrocarbons were detected.

During the site visit conducted for the 2000 Phase I ESA, several areas of surface staining were observed on concrete at the project site, including beneath the hydraulic system of an elevator, near pumps for ASTs, in an oil and paint storage shed, on the floor of the boiler room, compressor room, and parts storage room. No areas of standing oil or other materials were observed; however, oil and other materials used at the project site had the potential to seep through cracks to the subsurface. According to figures presented in the 2000 Phase I ESA, a petroleum oil storage area was present in the northwest corner of the project site, and a water supply well was located in the southeast portion of the project site near the former 16,000-gallon fuel oil AST.[44] The water supply well was properly destroyed in 2004.[45]

2005 Phase I and II ESA

A Phase I and II ESA was prepared for the project site in 2005 (2005 Phase I and II ESA)[46] and was submitted to ACDEH along with a request for ACDEH to provide oversight of a proposed construction project at the project site.[47] In coordination with the State Water Board, San Francisco Regional Water Quality Control Board, and the Department of Toxic Substances Control, ACDEH oversees the investigation and cleanup of hazardous materials releases to the environment under the Leaking Underground Fuel Tank (LUFT) program and the Site Cleanup Program (SCP), which together constitute the Local Oversight Program (LOP). The LOP provides a means for oversight agencies to review technical reports and provide review of proposed testing and remediation measures.

The 2005 Phase I and II ESA indicated that in 1985 a UST at the active gas station located at 1395 7th Street (a nearby site to the north of the project site) failed a tank integrity test and three monitoring wells and two trenches were installed around the leaking UST. Free product was observed in one of the monitoring wells and sheen and odor was present in both trenches. A 520-gallon waste oil UST was removed from the gas station property in 1996 and approximately 60 cubic yards of petroleum hydrocarbon contaminated soil were excavated from the UST location. In 1997, three fuel USTs and approximately 800 cubic yards of petroleum hydrocarbon contaminated soil were removed from the area where USTs are currently located at the gas station property, and floating petroleum fuel was observed on groundwater in the UST excavation. ACDEH had requested that additional studies of the UST area at the gas station property be performed; however, additional studies had not been performed at the time the 2005

[44] Environmental Resources Management, Inc. (ERM), 2000. Phase I Environmental Site Assessment of: Red Star Yeast and Prodcuts, A Division of Universal Foods Corporation, 1384 5th Street Oakland, California, 94607, June.

[45] Treadwell & Rollo, 2007a. Red Star Yeast Project, 1396 Fifth Street, Oakland, California, February 28.

[46] Remediation Services Inc. (RS), 2005. Phase I & II Environmental Site Assessment, Alameda County Assessor's Parcel Numnber 004-69-004, June 15.

[47] Treadwell & Rollo, 2005. Letter regarding 1396 5th Street, August 8.

Phase I and II ESA was prepared.. Based on the upgradient direction of this property from the project site, the property was considered to be a potential environmental threat to the project site.[48]

The 2005 Phase I and II ESA investigation included sampling of shallow soil in four borings located on the project site and sampling of groundwater in two of the borings. No evidence of significant contamination from petroleum hydrocarbons, volatile organic compounds (VOCs), or acids and bases was identified. Elevated concentrations of metals (lead and zinc) and relatively minor concentrations of polycyclic aromatic hydrocarbons (PAHs) were detected in one soil sample, which were attributed to contaminated fill material at the project site.[49]

2006 Subsurface Investigation and Subsequent Actions

In April 2006, a subsurface investigation was conducted at the project site which involved advancing six borings to depths of approximately 6.5 to 10 feet below the ground surface (bgs) for shallow soil and groundwater sampling. The investigation found the project site to be underlain by a heterogenous layer of fill that generally ranged in depth from 2.5 to 4 feet bgs and was composed of sand with varying amounts of clay, brick, concrete, and gravel. Low levels of total petroleum hydrocarbons (TPH) as diesel (TPHd) and motor oil (TPHmo) were detected in six soil samples, and two soil samples contained soluble lead at concentrations that exceeded California hazardous waste thresholds. Elevated levels of TPHd and TPHmo were detected in three groundwater samples.[50]

In September 2006, a 3,000-gallon diesel UST that had been filled with concrete slurry was removed from the southeast portion of the project site. The UST removal action included excavation of approximately 20 cubic yards of soil, removal and off-site disposal of approximately 6,300 gallons of groundwater from the excavation which was observed to have hydrocarbon sheen, and sampling of soil and groundwater. Contamination was not detected in the soil or groundwater samples from the excavation with the exception of TPHd detected at 180 microgram per liter (µg/L) in the groundwater sample. The City of Oakland Fire Department (OFD) issued a No Further Action Letter for this former UST in November 2006.[51] Based on the size and location of this former abandoned-in-place UST, it appears to have been the 3,000-gallon UST that formerly fueled boilers which was abandoned in place in 1989 as discussed above.

[48] Remediation Services Inc. (RS), 2005. Phase I & II Environmental Site Assessment, Alameda County Assessor's Parcel Numnber 004-69-004, June 15.

[49] Remediation Services Inc. (RS), 2005. Phase I & II Environmental Site Assessment, Alameda County Assessor's Parcel Numnber 004-69-004, June 15.

[50] Treadwell & Rollo, 2006. UST Soil and Groundwater Confirmation Sampling Results, Former Red Star Yeast Facility, 1396 Fifth Street, Oakland, California, December 15.

[51] Treadwell & Rollo, 2006. UST Soil and Groundwater Confirmation Sampling Results, Former Red Star Yeast Facility, 1396 Fifth Street, Oakland, California, December 15.

In November 2006, four pits were excavated in the area surrounding the former 3,000-gallon UST for the collection of soil samples and one groundwater sample. Only minor concentrations of TPHd were detected in two soil samples, and 270 µg/L of TPH as gasoline (TPHg) was detected in the groundwater sample, which was collected from 10 feet north of the former UST. The report prepared to document the UST investigation activities concluded that soil beneath the project site contained elevated concentrations of heavy metals and petroleum hydrocarbons, and provided recommendations for preparation of a health and safety plan and soil and groundwater management measures to be implemented during construction activities at the project site.[52]

In May 2007, excavation of shallow soil and confirmation sampling was performed in two areas of the project site. One area was in the northwest portion of the project site where elevated lead was detected during the 2005 Phase I and II ESA, and the other was in the eastern portion of the project site where the 1996 cleanup of mercury reportedly occurred. Concentrations of lead ranging from 94 to 190 milligrams per kilogram (mg/kg) were detected in confirmation samples from the northwestern excavation area. In the eastern excavation area concentrations of mercury ranging from 0.72 to 5.8 mg/kg were detected in confirmation samples collected from a depth of 6-inches, and lower concentrations of mercury ranging from 0.093 to 0.58 mg/kg were detected in confirmation samples from 12-inches. [53] The detected concentrations of lead in soil exceeded the current residential Environmental Screening Level (ESL)[54] established by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) of 80 milligrams per kilogram (mg/kg) and the detected concentrations of mercury in soil were below the current residential ESL of 13 mg/kg.[55] It appears that the excavated soils were left on-site for future disposal during construction activities.

2011 Subsurface Investigation and Remedial Action Plan

From January to March 2011, an additional subsurface investigation was performed at the project site. As part of the investigation, a geophysical survey was conducted across the project site to identify possible structures of concern such as an abandoned water supply well, an elevator shaft, sewer lines, and possible USTs. The geophysical survey identified four significant anomalies[56] in the central portion of the project site that warranted further investigation. Each of these areas

[52] Treadwell & Rollo, 2006. UST Soil and Groundwater Confirmation Sampling Results, Former Red Star Yeast Facility, 1396 Fifth Street, Oakland, California, December 15.

[53] Treadwell & Rollo, 2007b. Analytical Results of Soil Confirmation Sampling, Former Red Star Yeast Facility, 1384 Fifth Street, Oakland, California, May 30.

[54] Environmental Screening Levels (ELSs) provide conservative screening levels for over 100 chemicals found at sites with contaminated soil and groundwater. For further background, see San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, accessible at https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html.

[55] San Francisco Bay Regional Water Quality Control Board, 2019. Environmental Screening Levels, January.

[56] Geophysical anomalies are areas where geophysical properties differ from surrounding areas, which can be due to differences in soil conditions or the presence of buried objects.

was investigated using a backhoe to expose the anomaly. In each case, a metal structure was found, but the precise nature of each object was not identified. Soil samples were also collected from each excavation pit.[57] A fifth anomaly was also identified; however, shallow excavation revealed no subsurface structure.

Additional excavation performed in late March 2011 in the locations of the anomalies identified metal structures including two structural pilings, an elevator piston, a sewer system connection, and an abandoned water supply well.[58] The investigation also included advancing 15 borings to 4 to 6 feet bgs for soil sampling, and installation of five temporary monitoring wells to 6.5 feet bgs.

Based on the analytical results, the subsurface investigation concluded that the fill material on the project site has numerous hot spots of lead contamination and limited zones of mercury, and other heavy metal contamination. Three zones of contamination with hydrocarbon levels that exceeded ESLs established at the time were also identified within the fill. Only one groundwater sample (collected near the northern boundary of the project site) had detectable levels of hydrocarbons, with 2,400 µg/L oil-range hydrocarbons.[59]

In July 2011, a Remedial Action Plan (RAP)[60] was prepared for the project site. A RAP is a remedy selection document that explains the reasons for selecting a particular cleanup approach for a contaminated site. The RAP proposed the removal of fill materials to depths of 2 to 4 feet bgs in the eastern portion of the project site, removal of fill materials to 5 feet bgs in the western portion of the project site, targeted removal of deeper soil in select areas, and confirmation sampling to verify the removal of contaminated soil. Potential re-use of fill material from the eastern portion of the project site was proposed with the use of field screening, segregated stockpiling, and stockpile sampling to evaluate whether excavated fill material was suitable for re-use on the project site. In August 2011, the RAP was conditionally approved by ACDEH in a letter which included additional requirements related to the potential re-use of excavated fill material on the project site, including that ACDEH provide approval of fill material re-use based on screening and analytical results.[61]

Remedial Actions Implemented During Development Under Prior Entitlement

[57] Citadel, 2011a. Subsurface Investigation Report, Former Red Star Yeast Company, 1396 Fifth Street, Oakland, California 94607, April 4.

[58] Citadel, 2011b. Revised Remedial Action Plan, Former Red Star Yeast Company, 1396 Fifth Street, Oakland, California 94607, July 7.

[59] Citadel, 2011a. Subsurface Investigation Report, Former Red Star Yeast Company, 1396 Fifth Street, Oakland, California 94607, April 4.

[60] Citadel, 2011b. Revised Remedial Action Plan, Former Red Star Yeast Company, 1396 Fifth Street, Oakland, California 94607, July 7.

[61] Alameda County Environmental Health, 2011. Letter Re: Conditional Approval for Revised Remedial Action Plan for SLIC Case RO0002896 and GeoTracker Global ID T0601794669, Red Star Yeast/1396 Fifth Street LLC, 1396 5th Street, Oakland, CA 94607, August 1.

During the previous development of the project site in 2011 under prior entitlements, four suspected USTs were discovered beneath the sidewalk area along Fifth Street and were referred to as USTs No. 1 through No. 4. In October 2011, samples of liquids were collected from the fill ports of USTs No. 1 through No. 3. A fill port was not located for UST No. 4. An obstruction was noted in the fill port of UST No. 2 and therefore only the liquid within the UST No. 2 fill port was sampled. The content of UST No. 1 was observed to be primarily water with a slight petroleum sheen. The content of the UST No. 2 fill port was observed to be water with no odor or sheen. The content of UST No. 3 was observed to be water under a thick viscous petroleum layer. Concentrations of TPHd and TPHmo were detected in all of the liquid samples, and concentrations of xylenes and toluene (VOCs typically associated with gasoline) were detected in the liquid sample from UST No. 1, although TPHg was not detected in any of the liquid samples. Tetrachloroethylene (PCE) was also detected in the liquid from UST No. 3.[62]

In November 2011, soil was excavated to expose the tops of the suspected USTs. UST No. 1 was determined to be approximately 250 gallons in volume; UST No. 2 was found to be just a standpipe with no actual UST; UST No. 3 was determined to be approximately 2,500 gallons in volume; and UST No. 4 was determined to be approximately 10,000 gallons in volume. The OFD was present to witness the cleaning and removal of the USTs. USTs No. 1 and No. 3 were removed; however, UST No. 4 could not be removed due to the presence of active utilities and therefore this UST was filled with concrete slurry and abandoned in place. Soil and groundwater samples were collected from the pits where USTs No. 1 and No. 3 were removed, and three soil borings were advanced around UST No. 4 to collect soil and groundwater samples to evaluate whether the UST had leaked. The UST excavations were backfilled and no further remedial actions were performed for the USTs. The UST Removal Report[63] that was prepared to document the activities and findings summarized above indicated that relatively minor concentrations of TPHd and TPHmo were detected in soil samples and no significant findings were reported for TPH and VOCs in the groundwater.

Discrepancies were noted in the UST Removal Report,[64] including discrepancies between the identification numbers assigned to the USTs in the text/Figure 2 versus the attached field notes, photographs, and laboratory reports; and discrepancies between the analytical results presented in the text/data summary tables versus the attached laboratory reports. The UST Removal Report included photographs showing the removal of UST No. 3 which show significant oily staining of the excavation sidewalls and oily water in the excavation, and a laboratory report in the UST

[62] Citadel, 2012. Underground Storage tank Removal and Closure Report, Red Star Senio Living Apartments Development, 1396 Fifth Street, Oakland, California 94607, August 23.

[64] Citadel, 2012a. Underground Storage Tank Removal and Closure Report, Red Star Senior Living Apartments Development, 1396 Fifth Street, Oakland, California 94607, August 23.

Removal Report indicated that TPHmo was detected at a concentration of 21 milligram per liter (mg/L) in the groundwater sample from the UST No. 3 excavation, while the UST Removal Report text/summary table indicated that this sample contained 1 mg/L of TPHmo. Despite the discrepancies, adequate factual information about the UST removal activities (i.e., physical descriptions and photographs of the USTs and laboratory reports) was provided to characterize the encountered conditions.

In August 2012, a Soil Excavation Report[65] was prepared for the project site to document implementation of the RAP including the removal of contaminated fill materials from across the project site and confirmation sampling results. According to the Soil Excavation Report, a feature that was previously identified as an abandoned water supply well was determined to be a small diameter unconnected standpipe. The Soil Excavation Report indicated that the depth of excavation in the western portion of the project site ranged from 5 to 7.5 feet bgs, and the depth of excavation in the eastern portion of the project site ranged from 3 to 4 feet bgs, and fill material remained around much of the perimeter of the project site where the excavation sidewalls were sloped. Oil was observed to be seeping into the excavation sidewall along the northern property boundary near the northwest corner of the project site, and a picture of the seeping oil was included in Appendix J of the Soil Excavation Report.[66] Based on the results of a technical review conducted by the preparer of this CEQA analysis, the seeping oil in the picture appeared to be a very viscous liquid that was isolated to a small area (approximately 1 foot wide); and based on the viscous nature of the oil and its limited extent, the seeping oil would not be expected to migrate a significant distance into the project site.

Approximately 8,575 cubic yards of non-hazardous soil and 31 cubic yards of California hazardous waste soil was transported off-site for disposal. Only one of the final excavation bottom confirmation samples contained lead at a concentration (93 mg/kg) that exceeded the residential threshold of 80 mg/kg. The Soil Excavation Report indicates that to the best of their knowledge, all excavated soil was removed from the project site.[67]

Appendix A of the Soil Excavation Report is a Property Mitigation Plan (PMP)[68] that was prepared for the project site in 2008. The PMP summarized the findings of past investigations of the project site and provided recommended strategies to manage soil contamination to allow for redevelopment of the project site. The PMP included a list of environmental issues and their status at the time, which indicated that the 1951, 1952, 1957, 1958, and 1961 Sanborn maps

[65] Citadel, 2015. Soil Excavation Report, Former Red Star Yeast Company, 1396 5th Street, Oakland, California 94607, August 21, 2012, Revised September 22, 2015.

[66] Citadel, 2015. Soil Excavation Report, Former Red Star Yeast Company, 1396 5th Street, Oakland, California 94607, August 21, 2012, Revised September 22, 2015.

[67] Citadel, 2015. Soil Excavation Report, Former Red Star Yeast Company, 1396 5th Street, Oakland, California 94607, August 21, 2012, Revised September 22, 2015.

[68] SCS Engineers, 2008. Property Mitigation Plan, Assessor's Parcel Number 004-69-004 1384-1396 5t h Street, Oakland, California.

depict a "deep well" slightly west of the approximate center of the project site; and the 1967 and 1970 Sanborn maps depict a "deep well" near the northwestern corner of the project site. The PMP indicated that while there was evidence to conclude that one water supply well had been properly decommissioned; there was no evidence regarding the decommissioning of the other water supply well that was apparently located at the project site.[69] Neither of the wells discussed in the PMP were located in the southeast portion of the project site where a groundwater supply well was identified in a site map presented in the 2000 Phase I ESA. A Water Supply Well Survey included as Appendix B of the Soil Excavation Report also indicated that there are records of three water supply wells that were located on and/or adjacent to the project site and were owned by Red Star Yeast Company.[70]

In December 2012, ACDEH issued a directive letter[71] regarding the UST Removal Report and Soil Excavation Report which indicated that ACDEH identified several items that required additional information, clarification, or correction in order to adequately evaluate the effectiveness of the soil excavation and UST removals. The ACDEH letter pointed out discrepancies in the UST Removal Report that were discussed above, and requested clarification regarding soil management during construction and the sampling approach for the UST removals and remedial excavations. The ACDEH letter requested that a revised UST Removal Report and Soil Excavation Report be prepared for the project site.

In March 2013, a Soil Closure Report[72] was prepared for the project site which was essentially a revised version of the Soil Excavation Report. In April 2013, ACDEH issued a directive letter[73] which indicated that the Soil Closure Report addresses several of ACDEH's previous comments; however, it did not address or was unclear on several major items that are necessary to understand what occurred and the effectiveness of the excavation. The ACDEH letter pointed out that there was no documentation regarding the decommissioning of a second water supply well at the project site. The ACDEH letter once again requested that a revised UST Removal Report and Soil Excavation Report be prepared for the project site.

[69] SCS Engineers, 2008. Property Mitigation Plan, Assessor's Parcel Number 004-69-004 1384-1396 5t h Street, Oakland, California.

[70] Citadel, 2015. Soil Excavation Report, Former Red Star Yeast Company, 1396 5th Street, Oakland, California 94607, August 21, 2012, Revised September 22, 2015.

[71] Alameda County Environmental Health, 2012. Letter Re: Case File Review for SLIC Case RO0002896 and GeoTracker Global ID T06019794669, Red Star Yeast/1396 Fifth Street LLC, 1396 5th Street, Oakland, CA 94607, December 18.

[72] Citadel, 2013. Soil Closure Report, Former Red Star Yeast Company, 1396 5th Street, Oakland, California 94607, August 21, 2012, Revised March 21, 2013.

[73] Alameda County Environmental Health, 2013. Letter Re: Case File Review for SLIC Case RO0002896 and GeoTracker Global ID T06019794669, Red Star Yeast/1396 Fifth Street LLC, 1396 5th Street, Oakland, CA 94607, April 18.

In September 2015, a Revised Soil Excavation Report[74] was prepared for the project site. In December 2015, ACDEH issued a directive letter[75] which indicated that the Revised Soil Excavation Report addressed several of ACDEH's previous comments; however, it did not address several major items that are necessary to evaluate the case for closure. The letter requested that additional site assessment activities be conducted to address ACDEH's comments, including evaluating the quality of imported fill materials, evaluating the area where oil was observed to be seeping into the project site, and soil and groundwater sampling in the areas of the three identified USTs.

2016 Subsurface Investigation

In July 2016, a Phase II Subsurface Investigation Report and Closure Request (2016 Investigation)[76] was prepared for the project site which documented investigation activities performed to address ACDEH comments. The 2016 Investigation included advancing 15 borings for the collection of soil and groundwater samples. The 2016 Investigation found that all contaminant concentrations in the imported fill material samples were below residential ESLs established at the time with the exceptions of PAHs and arsenic. All PAHs were below the ESLs established at the time for the commercial land use scenario, and arsenic concentrations were well within the average range for naturally occurring arsenic. Groundwater results indicated that there were impacts from TPH, benzene, toluene, ethylbenzene, and xylenes (BTEX) and tert-butyl alcohol (TBA) in groundwater in the northern portion of the project site. The potential source of the groundwater contamination was indicated to be off-site properties to the north of the project site. Soil and groundwater sample results from adjacent to the former USTs at the project site were low or non-detect. [77]

The 2016 Investigation also acknowledged that an extensive fire occurred during the construction phase at the project site in 2012, significantly damaging the site structure and surrounding properties. The remaining structure from the fire consisted of a concrete podium, which was removed in April 2016.

2017 ACDEH Closure Letter

[74] Citadel, 2015. Soil Excavation Report, Former Red Star Yeast Company, 1396 5th Street, Oakland, California 94607, August 21, 2012, Revised September 22, 2015.

[75] Alameda County Environmental Health, 2015. Letter Re: Case File Review for SLIC Case RO0002896 and GeoTracker Global ID T0601794669, Red Star Yeast/1396 Fifth Street LLC, 1396 5th Street, Oakland, CA 94607, December 9.

[76] Citadel, 2016. Phase II Subsurface Investigation Report and Closure Request, Former Red Star Senior Living Apartments Development, 1396 Fifth Street, Oakland, California 94607, August 21, 2012, Revised September 22, 2015.

[77] Citadel, 2016. Phase II Subsurface Investigation Report and Closure Request, Former Red Star Senior Living Apartments Development, 1396 Fifth Street, Oakland, California 94607, August 21, 2012, Revised September 22, 2015.

On May 10, 2017, ACDEH issued a Closure Letter[78] which indicated that investigation and remedial actions for soil and groundwater at the project site were completed based on the current land use at the time as a commercial vacant lot. The Closure Letter indicated that if there is a proposed change in land use (including to any residential use), or if any redevelopment occurs, ACDEH must be notified, and ACDEH would re-evaluate the project site relative to the proposed redevelopment. The Closure Letter indicated that excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

2021 Environmental Update Letter

In May 2021, the property owner submitted a service request application to ACDEH for preliminary site review, which created a new identification number for the project site under GeoTracker.

In July 2021, an Environmental Update Letter[79] was prepared for the project site to describe potential environmental concerns that remained after previous investigations and removals; compare past investigation results with current screening levels; and describe the potential contaminant locations in relation to the proposed future development. The Environmental Update Letter indicated the following:

- Residual concentrations of VOCs, TPH, PAH, and heavy metals remaining in soil from the 2016 Investigation do not exceed the 2019 residential ESLs;
- Low concentrations of fuel-related VOCs consisting of benzene, toluene, total xylenes and TBA, and TPHg were reported above their respective maximum contaminant level (MCLs)[80], and the presence of these contaminants appears to be from an off-site, upgradient source; and
- Utilizing the shallow groundwater results to evaluate potential vapor intrusion concerns, benzene and ethylbenzene were reported above the vapor risk threshold. No other VOC concentrations exceeded the ESLs for vapor intrusion. [81]

[78] Alameda County Environmental Health, 2017. Case Closure for Site Cleanup Program Case No. RO0002896 and GeoTracker Global ID T06019794669, Red Star Yeast/1396 Fifth Street LLC, 1396 5th Street, Oakland, CA 94607, May 10.

[79] Citadel, 2021a. Environmental Update Letter, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, July 2.

[80] MCLs are drinking water standards established by the State of California pursuant to the California Safe Drinking Water Act.

[81] Citadel, 2021a. Environmental Update Letter, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, July 2.

The Environmental Update Letter indicated that the presence of some residual soil and groundwater contaminants would require health and safety measures in areas of ground disturbance and recommended that a Soil Management Plan be developed in coordination with the ACDEH, and that a vapor barrier should be installed under the building slab to mitigate the potential for vapor intrusion. [82]

Based on the results of a technical review conducted by the preparer of this CEQA analysis, the Environmental Update Letter erroneously listed the residential ESLs for the benzo(a)pyrene and naphthalene (which are PAHs) in soil as 18 mg/kg and 130 mg/kg, respectively, while they are actually 0.11 mg/kg and 3.8 mg/kg, [83] respectively. It appears that the Environmental Update Letter erroneously listed the higher non-cancer hazard values for these compounds rather than the lower cancer risk values presented in the ESLs. Naphthalene was not detected in soil samples at concentrations exceeding the residential ESL of 3.8 mg/kg; however, benzo(a)pyrene was detected in one soil sample at a concentration of 0.15 mg/kg, which slightly exceeds the residential ESL. The Environmental Update Letter also erroneously listed the higher values between the ESLs based on cancer risk and non-cancer hazard for several metals in soil; however, comparison to the correct ESLs (the lower of the cancer risk and non-cancer hazard) indicates that metals concentrations in soil did not exceed the residential ESLs or construction worker exposure ESLs with the exception of arsenic, which was within the range of naturally occurring background concentrations.

2021 ACDEH Phase I/II Screening Determination and Environmental Site Review

In August 2021, ACDEH Issued a Phase I/II Screening Determination[84] which indicated that ACDEH had reviewed the July 2021 Environmental Update Letter and information available on GeoTracker for the project site, and that ACDEH had determined that further investigation of the environmental concerns at the project site was warranted.

In September 2021, ACDEH issued an Environmental Site Review[85] for the project site indicating that any potential risk from subsurface contamination to construction workers, the adjacent community, and project site users could be mitigated during redevelopment activities and long-term use of the project site. Risk reduction measures could include implementation of appropriate soil and groundwater management practices, use of engineering controls such as vapor migration and mitigation systems, and/or capping of impacted soil beneath hardscape and foundations. ACDEH also requested that the Applicant enter into a Voluntary Remedial Action Agreement (Voluntary Agreement) with ACDEH to provide oversight of additional investigation

[82] Citadel, 2021a. Environmental Update Letter, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, July 2.

[83] San Francisco Bay Regional Water Quality Control Board, 2019. Environmental Screening Levels, January.

[84] ACDEH, 2021a. Phase I/II Screening Determination, 1396 5th Street, Oakland, CA 94607, August 26.

[85] ACDEH, 2021b. Environmental Site Review, Cleanup Program Site Case No. RO0003500 GeoTracker Global ID T0601794669 The Michaels Organization Redevelopment 1396 5th Street, Oakland, CA 94607, September 14.

activities to fill remaining data gaps to characterize soil and soil vapor at the project site and development of soil and groundwater management plans and engineering control documents to be implemented during development if warranted based on the additional data collection.

2022 Phase II Subsurface Investigation Report

In March 2022, a Phase II Subsurface Investigation Report (Phase II Report)[86] was prepared to document investigation activities performed at the project site between November 2021 and February 2022. The investigation activities were performed in general accordance with a Phase II Subsurface Investigation Work Plan[87] that was reviewed and approved by ACDEH.

On November 30, 2021, twelve borings were advanced at the project site for the collection of soil samples and installation of soil vapor probes. Six borings were advanced along the east, south and west perimeter of the project site and six borings were advanced in the interior of the project site. Soil samples collected from depths of approximately one, three and five feet bgs in the six perimeter borings were analyzed for TPH, VOCs, PAHs, heavy metals, and polychlorinated biphenyls (PCBs). Soil vapor probes were installed in all borings at five feet bgs or approximately one foot above groundwater if encountered in the boring (the depth to groundwater was observed to be as shallow as 2 to 2.5 feet bgs in some borings).

On December 2, 2021, sampling of the soil vapor probes was performed in general accordance with guidelines from the Department of Toxic Substance Control (DTSC). Samples could not be collected from five of the twelve soil vapor probes because they were found to be flooded by groundwater. In February 2022, 20 additional borings were advanced across the project site for soil and groundwater sampling using handheld power tools. Five shallow borings were advance to evaluate potential PCBs in soil in the eastern portion of the project site where low concentrations (below the residential ESL) of PCBs were previously detected in two soil samples collected from 1-foot bgs along the eastern perimeter of the project site. Fifteen borings were attempted for groundwater sampling across the project site; and groundwater was sampled from ten borings and analyzed for TPH and VOCs. Five borings could not be advanced deep enough to collect groundwater due to the hard packed soil conditions.

The Phase II Report indicated that all soil sample analytical results were below their respective residential ESLs with the exception of arsenic, which was within the range of normal background concentrations for the area. PCBs were not detected in the additional soil borings advanced in the eastern portion of the project site.

[86] Citadel, 2022. Phase II Subsurface Investigation Report, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, March 2.

[87] Citadel, 2021b. Phase II Subsurface Investigation Work Plan, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, October 6.

The Phase II Report indicated that TPHd and TPHmo concentrations were reported in groundwater samples collected from across the project site, and the TPHd concentrations exceeded the maximum contaminant level (MCL) Priority[88] in all but one sample. Concentrations of TPHd and TPHmo were generally higher in the western portion of the project site compared to the eastern portion, and could be migrating onto the project site from off-site sources to the north and east of the project site. [89]

The Phase II Report indicated that VOCs reported in one or more groundwater samples included BTEX, acetone, 2-butanone, chlorobenzene, chloroform, cis-1,2-dichloroethene, methyl bromide, naphthalene, tetrahydrofuran, 1,2,4-trimethylbenzene, and 1,3,5- trimethylbenzene, and all reported concentrations were below their MCL Priority.[90] The MCL Priority for naphthalene was erroneously reported in the Phase II Report to be 17 µg/L, while it is actually 0.17 µg/L,[91] and naphthalene was detected in one sample at 1.1 µg/L, which exceeds the MCL Priority. Shallow groundwater beneath the project site is not utilized for drinking water and is not planned to be utilized for drinking water in the future; therefore, having contaminants in groundwater at concentrations that exceed their MCL Priority does not necessarily represent a risk to public health. Comparison of VOCs concentrations in groundwater to the ESLs for groundwater vapor intrusion is appropriate because vapor intrusion is a concern for the project site. The concentrations of benzene in one groundwater sample from the project site equaled the ESL for residential groundwater vapor intrusion of 0.42 µg/L, [92] and benzene slightly exceeded this ESL in another groundwater sample (0.47 µg/L). The Phase II Report did not identify the concentrations of chlorobenzene, chloroform, cis-1,2-dichloroethene, methyl bromide, tetrahydrofuran, 1,2,4-trimethylbenzene, and 1,3,5- trimethylbenzene that were detected in groundwater and did not include a copy of the lab report for the February 2022 sampling event; therefore, it is not known whether other VOCs in groundwater may have exceeded ESLs for groundwater vapor intrusion. The ESL for groundwater vapor intrusion for chloroform is very low (0.81 µg/L) and elevated chloroform (exceeding the residential soil vapor ESL) has been identified in soil vapor at the project site, as discussed below.

The Phase II Report indicated that soil vapor sample analytical results exceeded the residential ESL for TPHg of 20,000 micrograms per cubic meter (µg/m^3) in one sample with a concentration of 35,000 µg/m^3; and VOCs detected in one or more soil vapor samples at concentrations that exceeded residential ESLs included the following:

[88] MCL Priority are thresholds presented in the ESLs which lists available MCL values, and if no MCL is available, lists the lower of the cancre or noncancer tapwater direct exposure levels listed in the ESLs.

[89] Citadel, 2022. Phase II Subsurface Investigation Report, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, March 2.

[90] Citadel, 2022. Phase II Subsurface Investigation Report, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, March 2.

[91] San Francisco Bay Regional Water Quality Control Board, 2019. Environmental Screening Levels, January.

[92] San Francisco Bay Regional Water Quality Control Board, 2019. Environmental Screening Levels, January.

- Benzene exceeded the residential ESL of 3.2 µg/m³ in five locations with a maximum concentration of 2,800 µg/m³. The remaining samples ranged in concentration from 2.7 µg/m³ to 17 µg/m³.
- Ethylbenzene exceeded residential ESL of 37 µg/m³ in one sample with a concentration of 41 µg/m³.
- Bromodichloromethane exceeded the residential ESL of 2.5 µg/m³ in three samples with a maximum concentration of 6.0 µg/m³.
- Chloroform exceeded the residential ESL of 4.1 µg/m³ in six of the seven soil vapor samples with a maximum concentration of 110 µg/m³.
- PCE exceeded the residential ESL of 15 µg/m³ in two samples with a maximum concentration of 93 µg/m³.
- Vinyl chloride exceeded the residential ESL of 0.32 µg/m³ in one sample with a concentration of 2.5 µg/m³.

The Phase II Report indicated that the elevated concentrations of TPHg and BTEX in one soil vapor sample from the west-central portion of the project site (in boring B24) appears to be isolated as the concentrations in the other borings are significantly lower; and that these concentrations may be related to the former USTs that were removed from the southern edge of the project site or impacted groundwater from the upgradient properties as data collected during this investigation does not show a significant contribution of TPHg or BTEX from soil or groundwater at the project site. [93] However, soil and groundwater samples were not analyzed from the area of boring B-24 during this investigation. The boring logs in the Phase II Report indicate that photoionization detector (PID)[94] readings were observed in boring B-24, including a PID readings of 5.6 parts per million (ppm) in the soil sample from 3 feet bgs and 1.2 ppm in the soil sample from 5 feet bgs. No PID readings above 0 ppm were noted on any other boring logs, and the soil samples that exhibited PID readings were placed on hold and not analyzed for TPH or VOCs. Additionally, three groundwater sampling borings were attempted in the area surrounding boring B-24 but were unsuccessful in reaching groundwater. Therefore, it is possible that TPH and BTEX impacted soil and/or groundwater is present in the west-central portion of the project site in the area of boring B24. Based on the results of a technical review conducted by the preparer of this CEQA analysis, the soil and groundwater sampling results from other borings advanced at the project site, including during the 2011 subsurface investigation, the 2012 investigation around the former USTs, and the 2016 Investigation, suggest that the extent of potential TPH and BTEX impacted soil and grounder in the area of boring B24 would be limited.

[93] Citadel, 2022. Phase II Subsurface Investigation Report, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, March 2.

[94] A PID is a device used to measure volatile organic vapors.

The Phase II Report indicated that bromodichloromethane and chloroform are common byproducts from the chlorination of drinking water and are not considered to be contaminants from past activities at the project site. The Phase II Report also indicated that the low levels of PCE and vinyl chloride reported in soil vapor samples do not appear to be sourced from the project site based on current and historical soil and groundwater data.[95] As discussed above, PCE was detected in the liquid sampled from UST No. 3 in 2011 prior to its removal, and UST No. 3 was located near some of the soil vapor samples where PCE was detected; however, PCE and other VOCs was not detected in the groundwater samples collected from the UST No. 3 excavation.[96] It is possible that there are impacts from PCE and related breakdown products (e.g., trichloroethylene [TCE], vinyl chloride) in soil and groundwater in the southwest portion of the project site in areas that have not been sampled, or in areas surrounding the project site. Impacts in soil vapor can migrate away from areas of contaminated soil and groundwater through preferential pathways such as utility trenches or other areas backfilled with more permeable materials.

Helium was used as a leak detection agent during soil vapor sampling and was detected in samples collected from six out of seven of the soil vapor probes that were sampled, with detected helium concentrations ranging from less than 1 percent to 12 percent.[97] According to DTSC, an ambient air leak of up to 5 percent is acceptable for soil vapor samples if quantitative leak tracer testing is performed by shrouding.[98] The Phase II Report indicated that three soil vapor samples exceeded the acceptable leakage threshold of 5 percent and that the results from these samples were in general agreement with the remaining samples analyzed and do not appear to be suppressing the VOC results; however, given the shallow nature of the sample depths and that helium was reported in several samples, the results may be biased low.

The Phase II Report recommended the following:[99]

- A soil management plan (SMP) be submitted to the ACDEH for approval. The SMP would provide guidance for the general contractor and grading contractor during soil removal and grading operations. The purpose of the SMP is to indicate best management practices when disturbing soil with residual contaminants and direct actions if potential contaminants are encountered.
- Any contaminated soil be identified during soil disturbance and removed from the project site using a licensed and qualified waste disposal company.

[95] Citadel, 2022. Phase II Subsurface Investigation Report, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, March 2.

[96] Citadel, 2012. Underground Storage tank Removal and Closure Report, Red Star Senio Living Apartments Development, 1396 Fifth Street, Oakland, California 94607, August 23.

[98] DTSC, 2015. Advisory, Active Soil Gas Investigations, July.

[99] Citadel, 2022. Phase II Subsurface Investigation Report, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, March 2.

- The design and installation of a vapor barrier across the footprint of the building and that the remainder of the project site be hardscaped

The Phase II Report also requested closure of the project site to allow residential occupancy;[100] however, it is not clear why closure was requested at this point given that the Phase II Report is recommending further actions (e.g., preparation and implementation of a SMP and installation of a vapor barrier). Closure of a site is typically only allowed by regulatory agencies after ensuring that all necessary actions to protect human health and the environment have been completed and documented. The Phase II Report has been submitted to ACDEH for review; however, ACDEH has not yet issued a response to the Phase II Report.

Voluntary Remedial Action Agreement (Voluntary Agreement)

In June 2022, the project applicant entered into a Voluntary Agreement[101] with ACDEH for the project site. The Voluntary Agreement requires that the project applicant perform all remedial actions and other activities requested by ACDEH and indicates that upon completion of site assessment and/or remedial action, ACDEH will provide a letter indicating that no further action is required (i.e., Closure Letter) for the project site. The Voluntary Agreement indicates that if remedial action includes installation of engineering controls at the project site to mitigate human health exposure from residual contamination, the project applicant must complete all remediation phases, mitigate all current risks to receptors, confirm risk management measures are in place, and prepare and record a covenant for environmental restrictions. The ACDEH would issue a No Further Remedial Action Letter when these actions are completed and a Risk Management Plan is prepared by the project applicant and approved by ACDEH. The Risk Management Plan must include a maintenance/monitoring/reporting program to confirm ongoing performance of the engineering controls and risk management measures until such time that subsurface contamination no longer poses a risk to human health if the engineering controls were not in place. The Risk Management Plan must also include routine inspection and testing to confirm the engineering controls continue to be protective of human health and the environment.[102]

WOSP EIR Findings and Existing Conditions at the Time versus Current Conditions

At the time that the WOSP EIR was prepared (May 2014), remediation activities had been completed at the project site including the cleaning and removal/in-place abandonment of USTs, removal of contaminated fill materials, and confirmation sampling. The WOSP EIR indicated that ACDEH staff had reviewed the Soil Closure Report, Soil Excavation Report, and UST Removal

[100] Citadel, 2022. Phase II Subsurface Investigation Report, Proposed Golden West Residential Development, 1396 Fifth Street, Oakland, California 94607, March 2.

[101] ACDEH, 2022. Voluntary Remedial Action Agreement, Agreement #: RO0003500-2022-06-08, executed June 9.

[102] ACDEH, 2022. Voluntary Remedial Action Agreement, Agreement #: RO0003500-2022-06-08, executed June 9.

Report, and had identified several items that require additional information, clarification, or correction before ACDEH would be able to adequately evaluate the effectiveness of the soil excavation and UST removals before considering the case for closure.

Since the WOSP EIR was prepared, there have been no activities at the project site or at nearby upgradient properties that would increase potential hazardous materials contamination at the project site. Based on the review of aerial imagery available on Google Earth, the upgradient properties immediately north and east of the project site have remained paved lots since the WOSP EIR was prepared. While there is also an active gas station immediately north of the project site at 1395 7th Street which has an open leaking UST (LUST) case, the LUST case is related to hazardous materials releases that occurred at this property prior to the replacement of the gas station's USTs and removal of contaminated soil in the late 1990s.[103] Operation of the USTs at this gas station is permitted through ACDEH,[104] therefore the USTs and fuel dispensing systems undergo annual inspections to ensure that they are not leaking and that leak detection systems are functioning properly as required by State law. Therefore, it is unlikely that recent operations at this gas station would contribute to subsurface contamination at the project site. Potential contamination that may have migrated beneath the project site from the previous hazardous materials releases at this upgradient gas station would be expected to decrease over time, as after a source of petroleum hydrocarbon contamination (e.g., leaking USTs) has been removed, the processes of natural attenuation and biodegradation typically reduces petroleum contamination in soil and groundwater over time. The concentrations of TPHg and BTEX compounds detected in groundwater samples collected near the northern boundary of the project site decreased between 2016 and 2022, suggesting that groundwater contamination that may have migrated beneath the project site from northern upgradient properties has decreased since the time that the WOSP EIR was prepared.

New information regarding soil, groundwater, and soil vapor conditions at the project site has become available since preparation of the WOSP EIR due to additional sampling activities performed at the project site under the oversight of ACDEH, as discussed above.

The new information has confirmed that soil contamination conditions at the project site have significantly improved due to the past implementation of the RAP, as only one minor exceedance of current residential ESLs for soil (except for arsenic, which is within the naturally occurring background range) was identified by the investigation activities performed in 2016 and 2021-2022.

[103] State Water Resources Control Board, 2022c. GeoTracker Webpage for Trucker's Friend. Available at: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100296accessed June 8, 2022.

[104] State Water Resources Control Board, 2022d. GeoTracker. Available at: https://geotracker.waterboards.ca.gov, accessed June 8, 2022.

While groundwater contamination from TPH and VOCs is present beneath the site, this is a condition that was present at the time the WOSP EIR was prepared, and the degree of groundwater contamination appears to have decreased with time and would be expected to continue decreasing with time due to natural attenuation and biodegradation, as discussed above.

While potential soil vapor contamination at the project site had not been evaluated at the time the WOSP EIR was prepared, it is reasonable to assume that the soil vapor conditions at the project site would have been similar if not worse than the current condition, as soil vapor conditions would be expected to improve following the previous remediation activities and with the apparent improvement in groundwater quality over time.

Consistency with WOSP EIR

Soil Contamination

Although the potential for significant residual contamination in soil at the project site appears to be low, the 2022 Phase II Report recommended that a SMP be prepared and implemented for the project site to ensure that potentially contaminated soil that may be encountered during construction would be appropriately managed. In accordance with SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), best management practices (BMPs) would be implemented by the contractor during construction to minimize potential soil and groundwater hazards, and the remedial recommendations of the 2022 Phase II Report, including preparation and implementation of an SMP, would be performed under the oversight of ACDEH. ACDEH oversight of SMP preparation and implementation would ensure that potentially contaminated soil would be managed in a manner that would protect human health and the environment.

Groundwater Contamination

The need to properly manage groundwater contaminated by TPH and VOCs during construction is a very common issue in the City and other urban areas and would be adequately addressed by existing regulations and compliance with the City's SCA-HAZ-1: Hazardous Materials Related to Construction (#43), which requires the project applicant to ensure that BMPs are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health; and SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), which includes measures such as compliance with all required treatment, remediation, and disposal requirements from applicable agencies; a Health and Safety Plan to ensure the protection of construction workers from hazardous materials releases; and implementation of construction BMPs. Oversight from ACDEH would further ensure that contaminated groundwater is appropriately managed during construction.

Soil Vapor Contamination

The presence of soil vapor contamination is also a very common issue in the City and other urban areas, and can be adequately addressed through the design, installation, operation, and maintenance of a vapor intrusion mitigation system (VIMS). While the 2022 Phase II Report indicated that a vapor barrier should be installed beneath the proposed building on the project site, it did not provide recommendations regarding the design of the of VIMS, which would ultimately be developed under ACDEH oversight. Based on the results of a technical review conducted by the preparer of this CEQA analysis, the VIMS for the project site may need to include active sub-slab ventilation in the western portion of the project site due to the highest concentration of benzene (2,800 µg/m^3) detected in soil vapor at the project site, and a passive sub-slab ventilation system may be adequate for the eastern portion of the project site where lower concentrations of VOCs were detected in soil vapor samples. A detailed design of the VIMS would be prepared as part of the implementation of SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), which requires that the remedial recommendations of the 2022 Phase II Report, including installation of a vapor barrier, would be performed under the oversight of ACDEH. Oversight from ACDEH would ensure that the design, installation, operation, and maintenance of a VIMS for the project site would be performed in a manner that would protect future site users from soil vapor intrusion.

Worker Safety

Compliance with SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44) would require a health and safety plan to be prepared for the project, which would ensure that construction workers would be protected from risks associated with hazardous materials during construction, including potentially encountering soil, groundwater, and soil vapor contamination.

Remedial Approach and Regulatory Oversight

Although ACDEH has not yet provided a response to the 2022 Phase II Report, based on the findings and recommendations of the 2022 Phase II Report and previous correspondence from ACDEH regarding the project, as discussed above, it is anticipated that preparation and implementation of an SMP and installation, operation, and maintenance of a VIMS would be the selected remedial approach for the project.

If ACDEH determines that there are data gaps at the project site that warrant further investigation, such as potential sources of soil vapor contamination or the potential presence of abandoned groundwater supply wells that do not have documentation of proper destruction, then ACDEH would require investigation of the data gaps and appropriate remedial actions to be taken to address any environmental concerns that are identified. Based on substantial evidence in the environmental records described above, ACDEH has demonstrated its ability to identify inaccuracies, discrepancies, and data gaps in investigation reports related to the project site and require the responsible party to correct the reports and perform further investigation. The ACDEH oversight process for remedial actions includes a public participation process that

includes sending a fact sheet to the nearby community and making plans for remedial actions available for a 30-day public review and comment period. This public participation process would ensure that any concerns from the public regarding proposed remedial actions would be considered and responded to prior to a final determination on the proposed remedial actions.

Summary

The WOSP EIR indicated that potential impacts from hazardous materials release sites would be mitigated to less-than-significant levels with compliance with local, state, and federal regulations for treatment, remediation, and/or disposal of contaminated soil and/or groundwater and the City SCAs that were in effect at the time, which are functionally equivalent to the City's current SCAs, including: SCA-HAZ-1: Hazardous Materials Related to Construction (#43), SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44~~),~~). While some investigation and ~~SCA-HAZ-3: Hazardous Material Business Plan (#45), which~~remedial actions are ongoing, adherence to and demonstration of compliance with these SCAs would ensure that the project site would be adequate for residential development prior to demolition, grading, and/or building permit issuance. Consistent with the findings of the WOSP EIR, compliance with existing hazardous materials regulations and the City's current SCAs discussed above would reduce potential impacts of the project related to ~~hazardous emissions or the handling of~~contamination from hazardous materials~~, substances, or waste~~ release sites to a less-than-significant level.

Hazardous Materials Use, Transport or Disposal (Impact Haz-3 of the WOSP EIR)

Consistent with the findings of the WOSP EIR, construction of the proposed project would involve the use, transport, storage, and disposal of hazardous materials such as fuels, solvents, oil and grease, and paint; however, required compliance with existing hazardous materials regulations and the City's current SCAs, including SCA-HAZ-1: Hazardous Materials Related to Construction (#43) and SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), which are functionally equivalent to the City's SCAs at the time the WOSP EIR was prepared, would ensure that potential impacts related to the routine transport, use, or disposal of hazardous materials during construction would be less than significant.

The proposed residential and retail land use of the project would involve the storage and use of only small quantities of commercially available hazardous materials for routine maintenance (e.g., paint and cleaning supplies) and may involve the storage of diesel fuel for an emergency generator. If the storage of diesel fuel for an emergency generator would occur, the project would be required to comply with existing hazardous materials regulations and SCA-HAZ-3: Hazardous Material Business Plan (#45). Consistent with the findings of the WOSP EIR, compliance with existing hazardous materials regulations and the City's SCA-HAZ-3: Hazardous Material Business Plan (#45), which is functionally equivalent to the City's previous SCA 74: Hazardous Materials Business Plan that was in place at the time the WOSP EIR was prepared,

would ensure that operation of the project would result in less-than-significant impacts related to the routine transport, use, or disposal of hazardous materials.

Hazardous Materials Near Schools (Impact Haz-4 of the WOSP EIR)

~~There are no schools located within a ¼-mile of the project site.[105]~~

The Pentecostal Way of Truth School Academy, a private K-12 school, is located at 1575 7th Street, approximately 1,200 feet west-northwest of the project site. There are no other schools located within a ¼-mile of the project site.[106] Consistent with the findings of the WOSP EIR, required compliance with existing hazardous materials regulations and the City's SCAs, including SCA-HAZ-1: Hazardous Materials Related to Construction (#43), SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), and SCA-HAZ-3: Hazardous Material Business Plan (#45), which are functionally equivalent to the City's SCAs at the time the WOSP EIR was prepared, would ensure that potential impacts related to hazardous materials near schools would be less than significant.

Emergency Access Routes (Impact Haz-6 of the WOSP EIR)

As noted in the WOSP EIR, 7th Street in the project area is an identified emergency evacuation route. The WOSP EIR determined that construction under the WOSP would result in temporary traffic lane closures along evacuation routes. The WOSP EIR noted that the temporary localized disruption of evacuation routes could be possible. Figure 7.1 of the Safety Element of the City of Oakland General Plan[107] indicates that the emergency evacuation routes in the vicinity of the project site include 7th Street and Adeline Street. Construction of the project may require temporary closure of portions of adjacent streets, including 7th Street. However, as described in the WOSP EIR, any need for traffic lane reductions or street closures due to construction would be short-term and localized. Additionally, the project would be required to comply with SCA-TRANS-1: Construction Activity in the Public Right-of-Way (#75), which requires an obstruction permit to be obtained from the City prior to placing any temporary construction-related obstruction in the public right-of-way, and requires the project to develop a Traffic Control Plan with a set of comprehensive traffic control measures should obstruction of any vehicle or bicycle travel lanes be required. The traffic control requirements imposed by the City through the permitting process would ensure that appropriate emergency access is maintained at all times during construction activities.

~~[105] California Department of Education, 2016. California School Directory. Availale at: http://www.cde.ca.gov/re/sd/, accessed August 2020.~~

[106] California Department of Education, 2022. California School Directory. Availale at: http://www.cde.ca.gov/re/sd/, accessed May 26, 2022.

[107] City of Oakland, 2004. General Plan, Safety Element, Figure 7.1. Amended 2012.

ALAMEDA COUNTY
DEPARTMENT OF ENVIRONMENTAL AGENCY

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
FOR HAZARDOUS MATERIALS RELEASES
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

July 5, 2022

Scott Cooper Hall (*Sent via E-mail to: scooper@tmo.com*)
The Michaels Organization
1970 Broadway #300
Oakland, California, 94612

SUBJECT: Conditions of Clearance for Site Redevelopment
Cleanup Program Site Case No. RO0003500 and GeoTracker Global ID T10000017096
The Michaels Organization Redevelopment
1396 5th Street, Oakland, CA 94607
Assessor's Parcel Number: 4-69-4

Dear Mr. Cooper:

In May 2021, Alameda County Department of Environmental Health (ACDEH) received a *Service Request Application for a Preliminary Site Review* from Oakland Housing Investors L.P. for a proposed residential redevelopment project on the parcel located at 1396 5th Street, in Oakland with Alameda County Assessor's Parcel No. 004-0069-004 (the "Site"). On August 26, 2021, ACDEH issued a *Phase I/II Screening Determination* based on a finding that further investigation of environmental concerns at the Site was warranted to support the proposed redevelopment project. ACDEH's determination was based on review of the document entitled *Environmental Update Letter*, dated July 2, 2021, prepared on your behalf by your environmental consultant Citadel EHS ("Citadel"), and the case file for a closed environmental case associated with the property (Cleanup Program Site Case No. RO0002896 – Red Star Yeast/1396 Fifth Street LLC).

On September 14, 2021, ACDEH opened a new environmental case (Cleanup Program Site Case No. RO0003500 – The Michaels Organization Redevelopment) and issued a letter entitled *Environmental Site Review* with a summary of our findings and a request for Oakland Housing Investors LP ("OHI") to enter into an Voluntary Remedial Action Agreement (VRAA) with ACDEH to provide regulatory oversight of environmental site investigations and cleanup to facilitate redevelopment at the above referenced property, if warranted based on additional Site investigation results.

In October 2021, ACDEH approved a work plan entitled *Phase II Subsurface Investigation Work Plan*, dated October 6, 2021, prepared by Citadel with a scope of work to evaluate soil vapor across the Site and shallow soil along the west, south and east perimeter of the Site that had not been previously sampled. Based on ACDEH's review of *Phase II Subsurface Investigation Report*, dated March 2, 2022, prepared by Citadel, ACDEH determined that corrective actions would be required to be implemented during Site redevelopment activities to mitigate risk from residual subsurface contamination at the Site from historical land use at and in the vicinity of the Site. On June 9, 2022, OHI executed a VRAA with ACDEH.

In June 2022, ACDEH held multiple teleconference calls with you and Citadel to discuss development of a site conceptual model and potential corrective actions to address subsurface contamination in soil, groundwater, and soil vapor from historical land use at and in the vicinity of the Site to facilitate redevelopment with the proposed new residential facility. On June 29, 2022 ACDEH received the document entitled D*raft Conceptual Site Model and Potential Corrective Action Plan* (the "*Draft CSM and*

Potential CAP"), dated June 28, 2022, prepared by Citadel. The *Draft CSM and Potential CAP* includes a summary of historical land use at and in the vicinity of the Site, a description of the current land use and proposed Site redevelopment, identification of chemicals of potential concern (CPOCs) in subsurface media based on previous environmental investigations, a vapor intrusion conceptual site model prepared in accordance ACDEH's *Decision Matrix for Development of Vapor Intrusion Conceptual Site Model* (the "*VI CSM*") and *Determination of Vapor Intrusion Risk Classification,* and proposed corrective actions to be implemented during Site redevelopment.

I. SUMMARY OF FINDINGS

Based on our review of the environmental case files for the Site, and the *Draft CSM and Potential CAP,* ACDEH is of the opinion that potential risk from subsurface contamination to construction workers, the adjacent community, and Site users can be mitigated during redevelopment activities and long-term use of the Site through implementation of: (1) corrective actions including soil and/or groundwater remediation and environmental engineering controls such as vapor intrusion migration and mitigation systems and/or capping of impacted soil beneath hardscape and foundations; and (2) institutional controls for long-term management of environmental engineering controls including recordation of an Environmental Deed Restriction on the Property, and compliance with an Environmental Risk Management Plan and Long-Term Operations, Maintenance, Monitoring and Reporting Plans.

A summary of ACDEH's findings is presented below:

- The approximately 38,000 square feet (0.88 acres) Site is located in West Oakland along the north side of Fifth Street and is bordered by the Bay Area Rapid Transit (BART) elevated tracks to the north, Mandela Parkway to the west, 5th Street to the south, and Kirkham Street to the east. The Site is currently a vacant undeveloped fenced lot and is proposed to be redeveloped with an 8-story residential facility.

- The currently proposed residential redevelopment project (PLN20-101) was unanimously approved by the City of Oakland Planning Commission on March 3, 2021. An appeal of the 1396 5th Street Project (PLN20-101-A01) has been filed challenging whether the Project complied with CEQA and is pending a final determination by the City of Oakland Planning Department.

- From approximately 1880 through 2003, historical land use at the Site consisted of various food grade industries including yeast and vinegar production (Red Star Yeast Factory) and a brewery. Primary demolition of the main manufacturing buildings and outer structures began in 2003 and continued through 2011 with supplemental removal of sewer connections and structural pilings.

- Between 2004 and 2011, environmental investigations and remedial actions were conducted to support a previously approved senior residential facility at the Site (the "Red Star Senior Apartments") and included removal/closure in place of four underground storage tanks (USTs) discovered in the sidewalk along 5th Street and excavation/removal of petroleum impacted soil and groundwater from the UST pits in 2006 and 2011, and excavation of 3 to 7 feet of primarily lead impacted fill material across the Site and backfilling with imported fill.

- In 2012 an arson fire destroyed the new senior residential facility project during construction. The Site was subsequently graded following demolition of the damaged structures and left as a vacant undeveloped fenced lot.

- In 2016, additional environmental investigations were conducted under the oversight of ACDEH to evaluate post-fire conditions at the Site and fill material imported to the Site during 2012 redevelopment activities. Based on the investigation results ACDEH closed Cleanup Program Site Case No. RO0002896 in May 2017 based on evaluation of risk under the land use scenario as a vacant fenced lot at the time of case closure, and with the condition that a proposed change in land use be reviewed by ACDEH for re-evaluation of human health risk from subsurface contamination at and in the vicinity of the Site to construction workers and the community during redevelopment activities and the Site users once the redevelopment is complete.

- Results of investigations conducted from 2016 to 2021 indicate residual PCOCs remain in soil, soil vapor, and/or groundwater beneath the Site at concentrations exceeding the San Francisco Bay Regional Water Quality Control Board's 2019 Environmental Screening Levels (ESLs) including volatile organic compounds (VOCs) in soil vapor and groundwater, and polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) in shallow soil. Further sampling of soil vapor, soil and groundwater is warranted to evaluate the contribution of on- and off-Site sources of the VOCs, and inform the design of remedial actions (if on-Site sources are confirmed) and vapor intrusion mitigation and migration engineering controls (VIMMECs) for the new building.

II. ACDEH CONDITIONAL APPROVAL

With the provision that the information provided to this agency is accurate and representative of currently known Site conditions, ACDEH concurs that implementation of VIMMECs presented in the *Draft CSM and Potential CAP* in conjunction with targeted excavation of shallow PCB impacted soil and/or capping beneath hardscape, and remediation of on-Site sources of VOC impacted groundwater and soil vapor (if identified) will minimize risk to on- and off-Site receptors from exposure to residual subsurface contamination at the Site. Therefore, at this juncture conditionally approves of the proposed Site development project provided the conditionals of approval in this letter are met.

CONDITIONS OF APPROVAL

ACDEH's conditions of approval are provided in ***Attachment 1 – List of Deliverables & Compliance Dates*** and ***Attachment 2 – Deliverable Requirements.*** The requisite deliverables must be:

(a) Submitted to ACDEH by the compliance dates listed in ***Attachment 1*** and approved by ACDEH prior to the start of each of the associated phases of corrective action implementation and Site redevelopment activities.

(b) Prepared in accordance with the requirements provided in ***Attachment 2***

(c) Uploaded to the Case file on the State Water Resources Control Board's GeoTracker database in accordance with requirements listed in *Responsible Party(ies) Legal Requirement & Obligations Instructions* included as ***Attachment 3***.

CLOSING

Thank you for your cooperation. ACDEH looks forward to working with OHI to implement corrective actions in conjunction with Site redevelopment activities. If you have any questions, please send me an email message at dilan.roe@acgov.org or Drew York at andrew.york@acgov.org

Sincerely,

Drew J. York
Senior Environmental Scientist

Dilan Roe, PE, C73703
Chief - Land Water Division

Encl.: Attachment 1 – List of Deliverables & Compliance Dates
Attachment 2 – Deliverable Requirements
Attachment 3 – Responsible Party (ies) Legal Requirement/Obligations Instructions

cc: Mark Drollinger, Citadel (*Sent via E-mail to: mdrollinger@citadelehs.com*)
Paresh Khatri, ACDEH (*Sent via E-mail to: paresh.khatri@acgov.org*)
Drew York, ACDEH (*Sent via E-mail to: andrew.york@acgov.org*)
Peterson Vollman, Planner, City of Oakland, (Sent via E-mail to: pvollmann@oaklandca.gov)
William Gilchrist, Director of Planning & Building, City of Oakland (Sent via E-mail to: WGilchrist@oaklandca.gov)
Carroll Fife, Council Member, City of Oakland – District 3 (Sent via E-mail to: CFife@oaklandca.gov)
Tanya Love, Chief of Staff - Council Member Fife, City of Oakland (Sent via E-mail to: TLove@oaklandca.gov)
Electronic File, GeoTracker

Alameda County Department of Environmental Health Local Oversight Program

Case No.:	**RO0003500**
Global ID:	**T10000017096**
Case Name:	**The Michaels Organization Redevelopment**
Case Address:	**1396 5th Street, Oakland, CA 94607**
Directive Letter Issue Date:	**July 5, 2022**

Attachment 1 – List of Deliverables & Compliance Dates

PURPOSE

This document identifies deliverables requested by Alameda County Department of Environmental Health (ACDEH) for the above referenced Cleanup Site Program (CSP) case and provides compliance dates for submittal of these deliverables. These deliverables are being requested pursuant to ACDEH's conditions of approval for the proposed residential redevelopment project at the subject property.

As required in ACDEH's **directive letter dated July 5, 2022**, ACDEH requests that you prepare the following deliverables in accordance with the requirements provided in ***Attachment 2 – Deliverable Requirements*** and submit the deliverables to the State Water Resources Control Board's GeoTracker website in compliance with the requirements identified in ACDEH's *Responsible Party(ies) Legal Requirement/Obligations Instructions* included as ***Attachment 3***. ACDEH also requests email notification verifying upload of the requested deliverables to the Case file on GeoTracker be provided to the primary caseworker, Drew York (*andrew.york@acgov.org*).

LIST OF DELIVERABLES AND COMPLIANCE DATES

Subsequent to ACDEH's issuance of this June 30th directive letter for submittal GeoTracker of the following deliverables:

1. **REDEVELOPMENT BASELINE SCHEDULE & CAP DESIGN INVESTIGATION DOCUMENTS**

   a. **Deliverable:** Baseline Project Schedule
   Submittal Compliance Date: Friday, August 5, 2022
   File Name: RO3500_PROJ_SCHD_2022-08-05

   b. **Deliverable:** Corrective Action Plan Design Investigation Work Plan
   Submittal Compliance Date: TBD based on Baseline Schedule
   File Name: RO3500_Final_CAP_WP_YYYY-MM-DD

   c. **Deliverable:** Corrective Action Design Investigation Report
   Submittal Compliance Date: TBD based on Baseline Schedule
   File Name: RO3500_Inv_CSM_R_YYYY-MM-DD

Recurring deliverable requirements throughout the implementation of corrective actions at the Site for submittal and ACDEH-approval:

2. **SCHEDULES AND STATUS REPORTS**

   a. **Deliverable:** Updated Project Schedules
   Submittal Compliance Date: Monthly after submittal Baseline Project Schedule
   File Name: RO3500_UPDATED_PROJ_SCHD_YYYY_MM_DD (first update)
   RO3500_UPDATED_PROJ_SCHD_XXXX-XX-XX (subsequent updates)

b. **Deliverable:** Weekly Status Reports
Submittal Compliance Date: First report is required to be submitted the first Monday after commencement of foundation/hardscape removal or earthwork activities and each Monday thereafter until installation of final groundcover at the Site is completed.
File Name: RO3500_STATUS_R_XXXX-XX-XX

3. **GEOTRACKER DATABASE AUDIT**

a. **Deliverable:** GeoTracker Database Compliance Certification Letter
Submittal Compliance Date: Friday, July 22, 2022, and ongoing as field activities are conducted
File Name: RO3500_GEOTRK_AUDIT_2022-07-22

Prior to the start of all site demolition and earthwork activities including grading and remedial excavation, submittal and ACDEH-approval of the following deliverables:

4. **REMEDIAL ACTION IMPLEMENTATION PLAN(S)**

a. **Deliverable:** Soil and or Groundwater Remedial Action Implementation Plans and Specifications
Submittal Compliance Date: Ninety (90) days prior to start of redevelopment activities
File Name: RO3500_RAIP_XXXX-XX-XX

5. **ONSITE GROUNDWATER MONITORING WELL & SOIL VAPOR PROBE DESTRUCTION (IF APPLICABLE)**

a. **Deliverable:** On-Site Groundwater Monitoring Well and Soil Vapor Probe Decommissioning Work Plan
Submittal Compliance Date: Sixty (60) days prior to probe and well decommissioning
File Name: RO3500_WELL_SVP_DCM_WP_ XXXX-XX-XX

b. **Deliverable:** On-Site Groundwater Monitoring Well & Soil Vapor Probe Decommissioning Report
Submittal Compliance Date: Thirty (30) days after decommissioning of probes
File Name: RO3500_WELL_SVP_DCM_R_XXXX-XX-XX

6. **DEVELOPER & CONTRACTOR DOCUMENTS**

a. **Deliverable:** Soil Excavation and Construction Sequencing Plan
Submittal Compliance Date: Thirty (30) days prior to start of Site development activities
File Name: RO3500_CONSTRC_SEQ_XXXX-XX-XX

b. **Deliverable:** Soil & Groundwater Management Plan (SGMP)
Submittal Compliance Date: Ninety (90) days prior to start of Site development activities
File Name: RO3500_SGMP_XXXX-XX-XX

c. **Deliverable:** Signed SGMP Certification Form (*ACDEH approval not required*)
Submittal Compliance Date: Ten (10) days prior to the start of Site development activities
File Name: RO3500 _SGMP_CERT_XXXX-XX-XX

7. **PERMITS, PLANS, AND APPROVALS FROM OTHER AGENCIES *(ACDEH APPROVAL NOT REQUIRED)***

   a. **Local Planning Department Entitlement Approvals**

      i. **Deliverable:** California Environmental Quality Act (CEQA) Compliance Documents
      Submittal Compliance Date: Thirty (30) days after City Adoption
      File Name: RO3500_DEV_CEQA_XXXX-XX-XX

      ii. **Deliverable:** Redevelopment Project Approval
      Submittal Compliance Date: Thirty (30) days after Project Approval
      File Name: RO3500_DEV_ENTITLE_XXXX-XX-XX

   b. **Local Building Department Construction & Demolition Permits**

      i. **Deliverable:** Building Permit Plan Set
      Submittal Compliance Date: Sixty (60) days prior to the start of Site redevelopment activities
      File Name: RO3500_BLD_PERMIT_XXXX-XX-XX

      ii. **Deliverable**: Grading Permits
      Submittal Compliance Date: Thirty (30) days prior to the start of Site redevelopment activities
      File Name: RO3500_ GRADING_PERMIT_XXXX-XX-XX

   c. **Groundwater Discharge to Sanitary Sewer or Storm Drain Permits**

      i. **Deliverable:** East Bay Municipal Utility District (EBMUD) Special Discharge Permit (if discharge to sanitary sewer)
      Submittal Compliance Date: Thirty (30) days prior to the start of discharge
      File Name: RO3500_EBMUD_DISCH_PERMIT_XXXX-XX-XX

      ii. **Deliverable:** Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) Permit (if discharge to storm drain)
      Submittal Compliance Date: Thirty (30) days prior to the start of discharge
      File Name: RO3500_NPDES_PERMIT_XXXX-XX-XX

      iii. **Deliverable:** City of Oakland Permits (Temporary Discharge to Sanitary Sewer System, Sewer Connection, Obstruction)
      Submittal Compliance Date: Thirty (30) days prior to the start of discharge
      File Name: RO3500_OAKL_SS_PERMITS_XXXX-XX-XX

Prior to backfilling remedial excavations and fill import activities, submittal and ACDEH-approval of the following deliverables:

8. **REMEDIAL ACTION COMPLETION & FILL IMPORT DOCUMENTATION**

   a. **Deliverable:** Remedial Completion Documentation Submittal Package
   Submittal Compliance Date: Fifteen (15) days prior to the start of backfilling

File Name: RO3500_REM_SOIL_EXC_COMP_XXXX-XX-XX

b. **Deliverable:** Application for Determination of Fill Material Suitability
Submittal Compliance Date: Thirty (30) days prior to the start of backfilling
File Name: RO3500_SOIL_IMPORT_XXXX-XX-XX

Prior to the start of foundation construction and utility installation, submittal and ACDEH-approval of the following deliverables:

9. **VAPOR INTURSION MITIGATION & MIGRATION ENGINEERING CONTROLS (VIMMECS)**

a. **Deliverable:** VIMMEC Design Documents
Submittal Compliance Date: Ninety (90) days prior to the start of foundation construction
File Name: RO3500_VIMMEC_DESIGN_XXXX-XX-XX

b. **Deliverable:** Draft VIMMEC Operations Maintenance, Monitoring & Report (OMM&R) Plan
Submittal Compliance Date: Ninety (90) days prior to the start of foundation construction
File Name: RO3500_DRAFT_OM_PLAN-VIMMEC_XXXX-XX-XX

c. **Deliverable:** EBMUD Clean Utility Corridor Work Plan
Submittal Compliance Date: Ninety (90) days prior to the start of foundation construction
File Name: RO3500_CUC_XXXX-XX-XX

d. **Deliverable:** Draft Work Plan Template for Tenant Improvements
Submittal Compliance Date: Ninety (90) days prior to the start of foundation construction
File Name: RO3500_DRAFT_TEN_IMPROV_WP_TEMPLATE_XXXX-XX-XX

e. **Deliverable:** VIMMEC Construction Quality Assurance Plan
Submittal Compliance Date: Ninety (90) days prior to the start of foundation construction
File Name: RO3500_VIMMEC_CQA_XXX-XX-XX

f. **Deliverable:** Approved Building Permit Plans with VIMMEC Incorporated (with Transmittal Letter by VIMMEC Design Engineer)
Submittal Compliance Date: Thirty (30) days prior to the start of foundation construction
File Name: RO3500_BLDG_PERMIT_VIMMEC_XXXX-XX-XX

g. **Deliverable:** VIMMEC Construction Quality Assurance Plan Status Reports
Submittal Compliance Date: After each CQA inspection
File Name: RO3500_VIMMEC_CQA_STATUS_R_XXX-XX-XX

Prior to building occupancy, submittal and ACDEH-approval of the following deliverables:

10. **REMEDIAL & CORRECTIVE ACTION COMPLETION REPORTS**

a. **Deliverable:** Soil Remedial Action and Consolidation Completion Report
Submittal Compliance Date: Sixty (60) days after completion of remedial actions
File Name: RO3500_RACR_XXXX-XX-XX

b. **Deliverable:** Soil Import Summary Report
Submittal Compliance Date: Sixty (60) days after completion of soil import
File Name: RO3500_RACR_XXXX-XX-XX

c. **Deliverable:** EBMUD Clean Utility Corridor Record Report of Construction
Submittal Compliance Date: Sixty (60) days prior to building occupancy
File Name: RO3500_CUC_RROC_XXXX-XX-XX

d. **Deliverable:** VIMMEC Record Report of Construction
Submittal Compliance Date: Sixty (60) days prior to building occupancy
File Name: RO3500_VIMMEC_RROC_XXXX-XX-XX

e. **Deliverable:** Vapor Mitigation System (VMS) Post Construction Performance Monitoring Report(s)
Submittal Compliance Date: Sixty (60) days prior to building occupancy
File Name: RO3500_VMS_PERF_MON_R_XXXX-XX-XX

11. **OPERATION, MAINTENANCE, MONITORING AND REPORTING (OMM&R) PLANS**

a. **Deliverable:** Final VIMMEC OMM&R Plan (with As-built plans)
Submittal Compliance Date: Forty-five (45) days prior to building occupancy
File Name: RO3500_FINAL_OM_PLAN-VIMMEC_XXXX-XX-XX

b. **Deliverable:** Final CAP OMM&R Plan (with As-built plans)
Submittal Compliance Date: Forty-five (45) days prior to building occupancy
File Name: RO3500_FINAL OM_PLAN_TRENCHDAM_XXXX-XX-XX

c. **Deliverable:** Final Work Plan Template for Tenant Improvements
Submittal Compliance Date: Forty-five (45) days prior to proposed tenant improvement plans
File Name: RO3500_FINAL_TEN_IMPROV_WP_TEMPLATE_XXXX-XX-XX

d. **Deliverable:** Financial Assurance Cost Estimate
Submittal Compliance Date: Sixty (60) days prior to building occupancy
File Name: RO3500_FIN_ASSUR_COST_XXXX-XX-XX

12. **INSTITUTIONAL CONTROLS**

a. **Deliverable:** Environmental Risk Management Plan
Submittal Compliance Date: Sixty (60) days prior to building occupancy
File Name: RO3500_RMP_XXXX-XX-XX

b. **Deliverable:** Financial Assurance Instrument
Submittal Compliance Date: Sixty (60) days prior to building occupancy
File Name: RO3500_FIN_ASSUR_XXXX-XX-XX

Throughout the Post-Closure Period, submittal and ACDEH-approval of the following deliverables:

13. **COMPLIANCE REPORTS**

    a. **Deliverable:** Routine Operations, Maintenance, and Monitoring Report / Site Inspection Reports
    Submittal Compliance Date: To be determined in accordance with schedule in Environmental Risk Management Plan
    File Name: RO3500_R_OMM_R_XXXX-XX-XX

    b. **Deliverable:** Non-Routine Operations, Maintenance, and Monitoring Report / Site Inspection Reports
    Submittal Compliance Date: To be determined in accordance with schedule in Environmental Risk Management Plan
    File Name: RO3500_NR_OMM_R_XXXX-XX-XX

    c. **Deliverable:** 5-Year Environmental Review Summary Report
    Submittal Compliance Date: To be determined in accordance with schedule in Environmental Risk Management Plan
    File Name: RO3500_5YR_RVW_R_XXXX-XX-XX

    d. **Deliverable:** Work Plans for Tenant Improvements
    Submittal Compliance Date: Sixty (60) days prior to proposed tenant improvement plans Risk Management Plan
    File Name: RO3500_TEN_IMPROV_WP_XXXX-XX-XX

    e. **Deliverable:** Tenant Improvement Completion Report
    Submittal Compliance Date: Sixty (60) days after tenant improvement completion and thirty (30) days prior to tenant occupancy
    File Name: RO3500_TENT_IMPROV_COMP_R_XXXX-XX-XX

14. **GEOTRACKER COMPLIANCE**

    a. **GeoTracker Database Compliance**
    Deliverable: Electronic Deliverable Format (EDF), logs, etc.
    Submittal Compliance Date: ongoing as investigation and reports are submitted

Alameda County Department of Environmental Health Local Oversight Program

Case No.:	**RO0003500**
Global ID:	**T10000017096**
Case Name:	**The Michaels Organization Redevelopment**
Case Address:	**1396 5th Street, Oakland, CA 94607**
Directive Letter Issue Date:	**July 5, 2022**

Subject: Attachment 2 – Deliverable Requirements

PURPOSE

The purpose of this document is to identify requisite elements for each of the deliverables requested by Alameda County Department of Environmental Health (ACDEH) as conditions of approval for the proposed residential redevelopment project at the subject property.

As required in ACDEH's **directive letter dated July 5, 2022**, ACDEH requests that you prepare the deliverables listed in ***Attachment 1 - List of Deliverables & Compliance Dates*** in accordance with the corresponding Technical Comments and Deliverable Requirements provided below and submit the deliverables to the State Water Resources Control Board's GeoTracker website in compliance with the requirements identified in ***Attachment 3***.

DELIVERABLE REQUIREMENTS

Subsequent to ACDEH's issuance of this June 30th directive letter for submittal GeoTracker of the following deliverables:

1. **REDEVELOPMENT BASELINE SCHEDULE & CAP DESIGN INVESTIGATION DOCUMENTS**

   a. **Baseline Project Schedule** – ACDEH requires submittal of a *Baseline Project Schedule* which outlines the path forward at the Site. The purpose of the *Baseline Project Schedule* is to: (1) identify milestones and important target dates, such as the start and end of phases of construction, and the target occupancy date; and (2) facilitate the allocation of resources to allow for reasonable and timely preparation and review of documents. The *Baseline Project Schedule* must include the permitting and phases of construction, and entries for deliverable submittals in accordance with the requisite compliance dates provided in ***Attachment 1***. The *Baseline Project Schedule* must include a minimum of 30 days for ACDEH review and approval of deliverables. An example of a schedule can be provided by ACDEH upon request.

   b. **Corrective Action Plan Design Investigation Work Plan** – ACDEH requires submittal of a work plan to collect additional soil, soil vapor, and groundwater samples to evaluate on—and off-Site sources of volatile organic compounds documented in soil vapor and groundwater beneath the Site to inform corrective action plan implementation design documents including plans and specifications for soil and groundwater remediation (if warranted) and environmental engineering controls.

   c. **Corrective Action Plan Design Investigation Report** – ACDEH requires submittal of a report documenting the results of the corrective action implementation of the scope of work in the ACDEH approved work plan.

Recurring deliverable requirements throughout the implementation of corrective actions at the Site for submittal and ACDEH-approval:

1. **SCHEDULES AND STATUS REPORTS**

   a. **Updated Project Schedules** – The *Project Schedule* is a living document that must be updated throughout the lifecycle of the project as a planning and scheduling tool. Updated *Project Schedules* must be submitted to ACDEH on Monday of each week during implementation of the remedial and potential corrective actions and site redevelopment activities to be reflective of the actual project timetables.

   b. **Weekly Status Reports** – *Weekly Status Reports* must be submitted to ACDEH on Monday of each week during implementation of the remedial and corrective actions and site redevelopment activities. The reports must include at a minimum:

      i. A description of approved remedial and corrective actions implemented, and discovery of unknown environmental conditions and contingency measures taken during the previous week;

      ii. A description of approved remedial and corrective actions that are planned to be conducted during the next current week;

      iii. Documentation showing compliance with the requirements of the *Soil and Groundwater Management Plan (SGMP*) included in the *Remedial Soil Excavation Plan* and the results of community protection monitoring, including:

         1) Identification of the number and duration of dust/volatile organic compound (VOC) action level exceedances (collectively, *Action Level Exceedances*);

         2) A summary of corrective actions implemented to address *Action Level Exceedances*;

         3) A figure depicting the inner quartile range of dust/VOC measurements at each monitoring station;

         4) A wind-rose diagram;

         5) A statement identifying if a potential unacceptable exposure to contaminated dust or volatile organic compounds (VOCs) occurred during the reporting period;

         6) Raw data collected from each monitoring station (as an appendix/attachment); and

         7) A copy of the Complaint Log and discussion of complaints received, and mitigation measures taken to resolve the complaints

2. **GEOTRACKER DATABASE AUDIT**

   a. Based on a brief compliance audit and review of electronic submittal of information (ESI) the Site is not in compliance with ESI requirements.

ACDEH requests Oakland Housing Investors LP conduct a thorough compliance audit in accordance with *Attachment 4* od this directive letter and upload all historical environmental documents related to the subject site including but not limited the missing soil and groundwater analytical data, documents and reports, maps, and boring logs to GeoTracker.

Prior to the start of all site demolition and earthwork activities including grading and remedial excavation, submittal and ACDEH-approval of the following deliverables:

3. **REMEDIAL ACTION IMPLEMENTATION PLAN**

a. **Soil Remedial Action and On-Site Consolidation Implementation Plans and Specifications –** A *RAIP* must be prepared under the direction of a Registered Civil Engineer and submitted to ACDEH for review and approval. An example the *Remedial Action Implementation Plans and Specifications* can be provided upon request. The *RAIP* must present a comprehensive and detailed plan for implementing the soil excavation and consolidation and capping presented in the *CAP* and additional soil, soil vapor and/or groundwater remediation activities, if warranted. The *RAIP* must include at a minimum the following:

i. **Soil Excavation**

1) Detailed figures (plan view and cross sections) delineating the vertical and lateral extent of the selected locations presented in the *Draft CAP* where constituents of concern have been reported above screening levels and additional areas of metal, TPH, and VOC impacts, if warranted.

2) Excavation phasing and other measures to minimize volatilization of VOCs in soil and potentially groundwater to outdoor air and exposure to receptors (for example phased demolition of pavement, dewatering, direct load of excavated soil into trucks for immediate off-haul, etc.);

3) Shoring and/or other stabilization measures;

4) Proposed confirmation sample locations and density, including in-situ soil samples for pre-characterization for offsite disposal at a permitted facility;

5) Estimated quantities of soil to be excavated and transported offsite for disposal.

6) Protocols for characterizing, segregating, and stockpiling excavated soil based on visual and olfactory observations, PID readings, and analytical results for total petroleum hydrocarbons, VOCs, and other appropriate analytes based on historic land use at the Site including metals associated with historic fill and operations; and

ii. **Consolidation and Capping**

7) The *RAIP* must include sufficient detail for the proposed engineering controls including consolidation and construction of the "capped" areas (hardscape and landscape areas). The *RAIP* must describe mitigation measures for areas of the Site not covered by an impermeable cap (e.g. landscaped areas, utility corridors, etc.) including but not limited to proposed clean fill and demarcation layers. Prior to proposing the details of consolidation and/or capping of impacted soil at the Site, ACDEH will require a meeting with the developer and the environmental consultant to discuss the design requirements for capped

areas that must be included in *VIMMEC Design Documents* submitted to ACDEH for review and approval.

iii. **Additional remediation measures**

8) Detailed plans for additional corrective actions for soil, groundwater, or soil vapor to reduce the risk to on- and off-site receptors from dissolved phase or vapor phase COCs, if warranted based on results of the site investigation activities mentioned above.

4. **ONSITE GROUNDWATER MONITORING WELL AND SOIL VAPOR PROBES DESTRUCTION (IF APPLICABLE)**

a. **On-Site Groundwater Monitoring Well and Soil Vapor Decommissioning Work Plan** – A *Work Plan* with a scope of work to properly destroy the On-Site vapor monitoring probes. Alameda County Public Works Agency decommissioning permits must be obtained prior to probe decommissioning, if applicable.

b. **On-Site Groundwater Monitoring Well and Soil Vapor Decommissioning Report** – A *Report* documenting the permitted destruction of the existing vapor probes in accordance with an approved *Work Plan*. The *Report* must include appropriate documentation (permits, waste disposal documentation, etc.). Final disposal documentation requires full and complete disposal forms, with a minimum of three accepting signatures. Documentation is not required for disposal of non-contaminated material such as vapor probe boxes.

5. **DEVELOPER & CONTRACTOR DOCUMENTS**

c. **Soil Excavation and Construction Sequencing Plan** – ACDEH requests submittal of a *Soil Excavation and Construction Sequencing Plan* prepared by the Environmental Consultant with input from the Developer and excavation contractor that includes a description of the proposed excavation phasing and other measures to minimize dust and exposure to receptors (for example phased demolition of pavement, use of containerized bins for excavated soil, direct load of excavated soil into trucks for immediate off-haul, etc.) The document must also contain figures illustrating the excavation phasing and other proposed staging areas including but not limited to potential stockpile locations and sequence of subsurface soil disturbance. Non-compliance with community protection measures for dust control as outlined in an ACDEH-approved *SGMP,* will result in a requirement to direct-haul (only) impacted soil from the Site.

a. **Soil and Groundwater Management Plan (SGMP)** - A SGMP must be prepared under the direction of a registered civil engineer or registered geologist and submitted to ACDEH for review and approval. The *SGMP* should describe procedures to be followed by environmental consultants, construction contractors and workers, and other property owner representatives during property improvements, identifying safety and training requirements for construction workers, establishing procedures for assessing and managing contaminated environmental media.

b. **Signed Construction SGMP Certification Form** – A copy of the *SGMP Certification Form* signed by Oakland Housing Investors LP and all their environmental professionals and contractors associated with implementation of field investigations at the Site certifying that they agree to comply with the ACDEH approved *SGMP*. Please note, before the start of all subsurface and

construction activities are approved at the Site, a copy of the certification form indicated above must be received by this agency.

6. **PERMITS, PLANS, AND APPROVALS FROM OTHER AGENCIES *(ACDEH APPROVAL NOT REQUIRED)***

ACDEH requires copies of all permits, plans, and approvals from other agencies to be uploaded to GeoTracker prior to the start of demolition activities at the Site. ACDEH will review the documents to ensure consistency with ACDEH-approved corrective actions presented in the VIMMECs. At a minimum, these submittals must include the following documents:

a. **Local Planning Department Entitlement Approvals** – Submittal of the following documents approved by the City of Oakland Planning Department. The documents must be accompanied by a transmittal letter prepared by the Environmental Consultant that states that the documents are consistent with the corrective action implementation plans ACDEH notes that substantial changes may invalidate the conclusions of the protectiveness of the proposed redevelopment of the Site with respect to the residual contamination and the proposed corrective actions presented in the corrective action implementation plans.

   i. California Environmental Quality Act (CEQA) Compliance Documents and documentation of the date of City adoption

   ii. Documentation of the redevelopment Project approval by the City of Oakland Planning Department

b. **Local Building Department Construction & Demolition Permits** – Submittal of the following documents approved by the City of Oakland Building Department. The documents must be accompanied by a transmittal letter prepared by the Environmental Consultant that states that the documents are consistent with the Site development plans and remedial actions presented in the *Final CSM and Finalized CAP.*

   i. The Building Permit Plan Set

   ii. Demolition and Grading Permits

c. **Groundwater Discharge to Sanitary Sewer or Storm Drain Permits** – Submittal of the following permits for discharge of contaminated groundwater to the sanitary sewer or storm drain system.

   i. East Bay Municipal Utility District (EBMUD) - Special Discharge Permit

   ii. Regional Water Quality Control Board - National Pollutant Discharge Elimination System (NPDES) permit

   iii. City of Oakland Permits - Temporary discharge to sanitary sewer, sewer connection, obstruction

Prior to backfilling remedial excavations and fill import activities, submittal and ACDEH-approval of the following deliverables:

7. **REMEDIAL ACTION COMPLETION & FILL IMPORT DOCUMENTATION**

All contaminated soil exported from the site must be disposed of at an off-Site permitted disposal facility unless otherwise approved by ACDEH. ACDEH requires that imported or exported soil to other than a permitted disposal facility be characterized in accordance with the ACDEH's *Soil Import/Export Characterization Requirements* which was last revised on August 9, 2019 (ACDEH's *Fill Guidance*). The *Fill Guidance* provides requirements for the characterization of soil to determine its suitability for use at another site. These requirements have been prepared to ensure that unsuitable soil is not imported to environmental cleanup sites or exported from environmental cleanup sites to properties with sensitive land uses. The *Fill Guidance* is for characterization of soil only and does not address requirements for characterization of other fill material including, but not limited to: crushed rock, pea gravel, recycled concrete, or flowable material.

At this time, ACDEH is exempting virgin concrete or flowable fill materials and virgin aggregates from characterization requirements presented in ACDEH's *Fill Guidance*. Written approval is required from ACDEH prior to the import or on-Site re-use of recycled aggregates (including crushed concrete or asphalt). Please be advised that ACDEH has adopted the New Jersey Department of Environmental Protection Solid and Hazardous Waste Management Program's *Guidance for Characterization of Concrete and Clean Material Certification for Recycling* dated January 12, 2010, and *Recycled Asphalt Pavement and Asphalt Millings Reuse Guidance* dated March 2013 amended with applicable ESLs.

a. **Remedial Action Completion Documentation Submittal Package –** A submittal package with a transmittal letter prepared by the Environmental Consultant documenting that remedial soil excavation has been completed in accordance with the *Draft RAIP* and *SGMP.* The submittal package must be submitted to ACDEH for review and approval prior to backfilling remedial excavations. ACDEH suggests the submittal package be submitted via email correspondence to facilitate quick review and backfill approval. At a minimum, the report must include scaled figures (plan views and cross-sections) showing confirmation sampling locations and extents of excavation, tabulated volumes of soil excavated disposition (on-Site stockpile, direct haul to off-Site disposal facility, on-Site consolidation), volumes of contaminated groundwater removed and disposition (temporary storage in on-Site tanks, discharged to sanitary sewer or storm drain- if warranted), subsurface infrastructure removed and disposition, tabulated soil and groundwater analytical results compared to cleanup goals, and draft soil and groundwater laboratory analytical reports.

b. **Application for Determination of Fill Material Suitability** – If soil is imported to the Site for construction or as part of an environmental engineering controls, ACDEH requires the submittal of the *Application for Determination of Fill Material Suitability* to support requirements outlined in ACDEH's *Fill Guidance*. Submittal of the application and requisite supporting documents must be submitted to ACDEH for review and approval prior to import of fill. Requisite documents are outlined in the *Application* and include but are not limited to proposed sources, sampling and profiling protocols, analytical laboratory reports, and tables with analytical results and applicable environmental screening levels.

Prior to the start of foundation construction and utility installation, submittal and ACDEH-approval of the following deliverables:

8. **VAPOR INTURSION MITIGATION & MIGRATION ENGINEERING CONTROLS (*VIMMECS*)**

   a. ***VIMMEC* Design Documents** – Description of proposed corrective actions presented in the *Final CSM and Finalized CAP* include but are not limited to the installation of *VIMMECs* consisting of the vapor barrier, passive sub-slab venting system beneath buildings, and trench plugs within utility corridors. *VIMMEC Design Documents* must be prepared by a Registered Civil Engineer and submitted to ACDEH for review and approval. The *VIMMEC Design Documents* must include a basis of design report (*BOD Report*) that identifies design objectives, assumptions, engineering calculations, and construction quality assurance and quality control measures (*CQA/CQC*); construction plan set and specifications (*Plans & Specs*); and an Operations, Maintenance, Monitoring and Reporting (*OMM&R*) Plan including post-construction/pre-occupancy VIMMEC system testing procedures, and long-term operation and maintenance. The *BOD Report* and *Plans & Specs* must be prepared with sufficient detail to evaluate the validity, constructability, and design performance of the engineering controls. The *BOD Report*, *Plans & Specs*, and *OMM&R Plan*. The ACDEH approved VIMMEC *Plans & Specs* must be incorporated into the building and utility construction plans and specifications.

   b. **Draft VIMMEC OMM&R Plan** – A *Draft VIMMEC OMM&R Plan* for VIMMECs. The *Draft Plan* must include, at a minimum, VIMMEC components proposed to be installed with specifications; responsible party information; details of required OMM&R activities; emergency contacts and protocols in case of system failure; and copies of the field forms to be completed during routine and emergency inspections.

   c. **East Bay Municipal Utility District (EBMUD) Clean Utility Corridor (CUC) Work Plan** – A *Draft EBMUD CUC Work Plan* to install clean utility corridors for the connection of EBMUD service to the Site. The Work Plan must include EBMUD's specifications for the demarcation fabric and pipe bedding and backfill; construction plans (plan view and cross sections) showing locations of environmental samples collected at the site in the vicinity of the alignment and the location and specification of trench dams for vapor migration control; project schedule showing the coordination during the clean corridor installation with proposed dates for inspections of trench dams and submittal of documents to and approval by this agency; a figure showing the location of the temporary trench spoil stockpiling; reporting requirements including clean fill documentation to ACDEH prior to backfill and a record report of construction of the clean corridor for ACDEH review and approval; and reference to an attachment with the site SGMP updated to be reflective of developed conditions.

   d. **Draft Work Plan Template for Tenant Improvement –** A template work plan presenting requirements for the implementation of tenant improvement activities identified in burdened activities in the *Environmental RMP*. The template requirements must demonstrate compliance with the *Environmental RMP*, *Final OMM&R Plans*, and the *SGMP* as applicable. Other template requirements include a copy of the City of Oakland approved Building Permit Plan set.

   e. ***VIMMEC* Construction Quality Control/Quality Assurance Plan** – A comprehensive report that identifies the members and responsibilities of the CQA Team and documents procedures and

protocols that will be implemented by the CQA team during construction and testing of the *VIMMEC*s to ensuring compliance with the ACDEH approved *Plans & Specs*. The CQA Plan must include at a minimum:

i. **Material Quality Control and Quality Assurance** – Identification of measures for ensuring that materials are free from defect prior to installation.

ii. **Material Storage** – Declaration of materials storage criteria and requirements

iii. **Installer Qualifications** – Declaration of the minimum qualifications for installers. At a minimum, installers for barrier systems must be certified by the manufacturer. Contractors installing probes installed at a depth greater than 4.9 feet bgs must have a C-57 drillers license.

iv. I**nspections** – Identification of minimum required inspections and triggers for additional inspections. This identification must include sequencing with other disciplines and must also include copies of forms that will be completed by the CQA inspector at the end of each inspection.

v. **Inspector Qualifications** – Declaration of the minimum qualifications for inspectors.

vi. **Protective Measures and Prohibited Work Practices** – Description of protective measures and prohibited work practices intended to limit potential damage to the *VIMMECs* during construction.

vii. **Materials and Installation Testing** – Requirements for testing installed system components (e.g., seam tensile test, coupon test, wet mil test, smoke test) and triggers for additional testing requirements. At a minimum, the type, frequency, and passing conditions for each test must be included. Contingencies for how failures will be addressed must be included.

f. **Approved Building Permit Plans with *VIMMEC* Incorporated** – A copy of the City of Oakland approved *Building Permit Plan Set* for site redevelopment incorporating the *VIMMECs* must be submitted to ACDEH for review to verify that the *VIMMECs* have been incorporated into the plans as approved by ACDEH. Submittal of the *Building Permit Plan Set* must be accompanied by a transmittal letter prepared by the VIMMEC Design Engineer that states that the plans are consistent with the ACDEH approved *BOD Report* and *Plans & Specs* and identifies plan sheets where the *VIMMEC* design elements are incorporated.

g. ***VIMMEC* Construction Quality Assurance Plan Status Reports –** Reports documenting the status of the *VIMMEC* installation and testing. The reports must be signed by the CQA Engineer with Responsible Charge and include at a minimum photo-logs and CQA Inspection Sheets.

Prior to building occupancy, submittal and ACDEH-approval of the following deliverables:

9. **REMEDIAL ACTION COMPLETION REPORTS**

a. **Soil Remedial Action and Consolidation Completion Report (*RACR*)** – A comprehensive report documenting implementation of the remedial and consolidation actions presented in the *Final*

CAP, and *RSEP* demonstrating that remedial action objectives have been met or identifying any remedial action objectives that have not yet been met. The *RACR* must include as-built drawings and photo documentation and must include a certification by the remedial action design engineer that the remedial measures were implemented in accordance with the approved *RACP*. The *RACR* must also include copies of all permits and must document at a minimum the following (if applicable):

i. Description of the remedial soil excavation activities including at a minimum the information submitted in the *Remedial Soil Excavation Completion Documentation Submittal Package*, the final disposition of soil (on-Site consolidation and capping, off-Site disposal), a figure depicting the surveyed locations and depths of consolidated lead impacted soil, copies of all manifests or other waste disposal documentation, and final laboratory analytical reports for soil confirmation samples and pre-characterization results of in-situ sampling and/or stockpiling sampling for soil disposed of off-Site.

ii. Description of groundwater removal activities with supporting documentation, including but not limited to tables, figures, laboratory analytical reports, copies of discharge reports, and corrective actions associated with unauthorized releases during construction activities.

iii. Description of removal of subsurface infrastructure in source areas (e.g., oil/water separation and piping, sanitary sewer laterals) and copies of waste manifests.

iv. Description of discovery of unexpected subsurface structures (e.g., tanks, vaults, sumps), contingency measures implemented, and copies of laboratory analytical reports and waste manifests.

v. Certification of compliance with the *SGMP* protocols during implementation of remedial measures including but not limited to agency notification and reporting requirements, pre-field activities (site security and access, traffic control, excavation permits, notification and utility clearance), waste management, soil and groundwater management, storm water management, dust and odor emission control, and contingency measures for discovery of unexpected underground structures.

vi. As-built plans showing the surveyed locations of consolidated impacted soil (plans and cross-sections)

vii. Photo-logs and field notes

b. **Soil Import Summary Report**– If soil is imported to the Site, a *Report* documenting the import/export of soil (if not disposed of at a permitted disposal facility) must be drafted in accordance with the *Fill Guidance*. The *Report* must be uploaded to the GeoTracker information repositories for both the fill material source area and the destination. At a minimum the *Report* must include the following:

i. A cover letter from the owner of the proposed fill source material that states, at a minimum, the following: "I have read and acknowledge the content, recommendations, and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH." This cover letter must be signed by the owner of the proposed fill source material or a legally authorized representative of the owner of the proposed fill source material.

ii. A statement that fill material characterization was conducted under the responsible charge of a Qualified Professional. This statement must be accompanied by the signed and dated seal of the Qualified Professional with responsible charge.

iii. Summary tables of soil import logs. These logs must include the following information for each delivery of fill material: arrival date, manifest number or truck tag, quantity of fill material delivered, originating facility, and profile number.

iv. A figure depicting the location and depth of imported soil. If fill material from multiple sources has been imported, the location and depth of imported soil from each source must be distinguished.

v. Copies of all manifests or other documentation of soil import as an appendix.

vi. Copies of all fill characterization profiles as an appendix.

h. **Clean Utility Corridor (CUC) Record Report of Constriction (RROC)** – A comprehensive report documenting the installation of clean utility corridors; construction quality assurance (CQA) activities and observation and findings during construction of the *CUCs;* and clean fill documentation. The *RROC* must include as-built drawings, photo documentation, certification by the CQA Manager that the completed *CUC* was installed in accordance with the ACDEH approved *Work Plan.*

c. ***VIMMEC* Record Report of Construction (RROC)** – A comprehensive report documenting the CQA activities and observation and findings during construction of the *VIMMECs* including vapor mitigation systems (VMS) beneath buildings and trench dams/plugs in utility corridors. The *RROC* must include as-built drawings, photo documentation, certification by the CQA Manager and VIMMEC Design Engineer that the completed VIMMEC and utility trench plugs were installed in accordance with the ACDEH, approved *BOD Report* and *Plans & Specs*.

d. **VMS Post Construction Performance Monitoring Report(s)** – A *Report* documenting the results of the VMS performance monitoring (indoor air, sub-slab soil vapor, and vent riser sampling) and certification by the VIMMEC Design Engineer that the VMS is functioning as designed.

10. **OPERATION, MAINTENANCE, MONITORING AND REPORTING (*OMM&R*) PLANS**

a. **Final VIMMEC and CAP OMM&R Plan** – A *Final VIMMEC OMM&R Plan* for the vapor mitigation engineering controls. The *VIMMEC OMM&R Plan* must include, at a minimum documentation of the installed *VIMMEC* components, including As-Built drawings and specifications, survey coordinates of the trench dams, and photo documentation; responsible party information; details of required OMM&R activities; emergency contacts and protocols in case of system failure; and copies of the field forms to be completed during routine and emergency inspections.

b. **Final Work Plan Template for Tenant Improvement –** A Final template for *Tenant Improvement Work Plan* presenting requirements for the implementation of tenant improvement activities identified in burdened activities in the *Environmental RMP*. The template requirements must demonstrate compliance with the Environmental *RMP*, *Final OMM&R Plans*, and the *SGMP* as

applicable. Other template requirements include a copy of the City of Oakland approved Building Permit Plan set.

c. **Financial Assurance Cost Estimate** – Cost estimates for the continued implementation and maintenance of the *VIMMECs*. The details of this financial cost estimates must be developed by the project proponent and ACDEH as design plans are finalized and approved. The cost estimates must provide estimates to construct, monitor, and provide regulatory oversight costs for long-term operations and maintenance of the *VIMMECs*. Estimates of these costs must be based, in part, on the cost estimates for project implementation that are established in the *RSEP* and *OMM&R Plans*.

11. **INSTITUTIONAL CONTROLS**

a. **Environmental Risk Management Plan (RMP)** – A *Environmental RMP* for long-term site management plan written for the property owner to facilitate compliance with the requirements of the *Deed Restriction*. The *Environmental RMP* is a communications document for non-technical audiences identifying the location of residual COCs, potential deleterious health effects from exposure to COCs, and engineering, administrative, and institutional controls that are implemented at the Site to control unacceptable risk due to exposure from COCs. The *Environmental RMP* must include sufficient detail that non-technical staff can identify what work practices are unacceptable and can identify engineering controls if encountered. The *Environmental RMP* must also include communications and reporting requirements so that, in the event the engineering controls are encountered, the appropriate professionals and regulatory agencies can be notified to ensure that the integrity of the engineering controls is maintained.

b. **Financial Assurance Instrument** – Documentation of an appropriate financial instrument to assure ACDEH of implementation and maintenance of the *VIMMECs*. The details of this financial assurance must be worked out by the project proponent and ACDEH as design, construction, and monitoring plans are finalized and approved. The financial assurance instrument must provide for sufficient funds to construct, monitor, and provide regulatory oversight costs for long-term operations and maintenance of the *VIMMECs*. Estimates of these costs must be based, in part, on the cost estimates for project implementation that are established in the *Updated CAIP* and *OMM&R Plans*.

Throughout the Post-Closure Period, submittal and ACDEH-approval of the following deliverables:

12. **COMPLIANCE REPORTS**

a. **Routine Operations, Maintenance, and Monitoring Report / Site Inspection Reports** – A report documenting compliance with the *Environmental RMP* and the *OMM&R Plan*. At a minimum, this report must include the following elements:

i. Narrative description of environmental activities (e.g. site inspections, sampling, maintenance) and/or activities covered by the *Environmental RMP* (e.g. earthwork, utility work, slab modifications or penetrations) that were completed during the reporting period;

ii. Narrative description of the environmental activities or activities covered by the *Environmental RMP* that are planned for implementation during the next reporting period;

iii. Results of the physical condition inspection for accessible elements of the engineering controls, including a photo-log with representative photographs;

iv. Tabulated results of the monitoring of performance metrics;

v. An evaluation of the current condition and performance of engineering controls, including a statement that the engineering controls are or are not achieving design objectives;

vi. Identification of any tenant or ownership changes that occurred during the reporting period;

vii. Signed tenant acknowledgement and compliance statements;

viii. Copies of field inspection forms and/or maintenance logs; and

ix. Updates to the *RROC* as "redline" drawings as necessary.

b. **Non-Routine Operations, Maintenance, and Monitoring Report / Site Inspection Reports** – A report documenting the implementation of non-routine site inspections and/or maintenance and monitoring activities. Submittal of this report is required when trigger conditions identified in the *Environmental RMP* are met (e.g. earthquake, un-planned/emergency utility work within burdened areas, unanticipated damage to engineering controls or slab foundation). At a minimum, this report must include the following elements:

i. Identification of the conditions that triggered the non-routine report;

ii. Description of the Scope of Work implemented;

iii. Documentation of compliance with requirements of the *Environmental RMP* and *OMM&R Plan*;

iv. An evaluation of the condition and performance of engineering controls against design objectives after completion of the scope of work;

v. Identification of any outstanding environmental issues;

vi. Copies of field inspection forms and/or maintenance logs; and

vii. Updates to the *RROC* as "redline" drawings as necessary.

c. **5-Year Environmental Review Summary Report** – A *Report* presenting an evaluation of the performance and adequacy of the engineering and administrative controls that have been implemented at the Site in accordance with the requirements of the *OMM&R Plan* and the *Environmental RMP*. This *Report* may be combined with a *routine Operations, Maintenance, Monitoring, and Reporting Plan* or submitted as a stand-alone document and must, at a minimum have each of the following additional elements:

i. Results of the collection of risk metrics (collection of concentration data from applicable source area, point of control, and point of exposure);

ii. An evaluation on the performance of the engineering and administrative controls;

iii. An evaluation on the adequacy of the current financial assurance mechanisms;

iv. An evaluation on if termination criteria have been met; and

v. Recommendations for modifications or termination of the administrative or engineering controls.

d. **Work Plans for Tenant Improvement –** A *Work Plan* presenting a scope of work for the implementation of tenant improvement activities identified in burdened activities in the *Environmental RMP*. The scope of work must demonstrate compliance with the Environmental *RMP*, *OMM&R Plans*, and the *SGMP* as applicable. The *Work Plan* must include a copy of the City of Oakland approved Building Permit Plan set.

e. **Tenant Improvement Completion Report –** A *Report* documenting the implementation of an ACDEH approved Work Plan for Tenant Improvement and demonstrating compliance with the *Environmental RMP*, *OMM&R Plans*, and the *SGMP* as applicable. The *Report* must include As-built drawings of the tenant improvements.

13. **GEOTRACKER COMPLIANCE**

a. **GeoTracker Database Compliance -** On-going compliance by uploading all environmental documents related to the subject site including but not limited soil, groundwater and soil vapor analytical data, monitoring well depth-to-water measurements, and surveyed location and elevation data for sampling locations, documents and reports, maps, and boring logs to GeoTracker.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** May 19, 2020
	ISSUE DATE: July 25, 2012
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016, December 14, 2017
SECTION: ACDEH Procedures	**SUBJECT:** Responsible Party(ies) Legal Requirements / Obligations

REPORT & DELIVERABLE REQUESTS

Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of all reports in electronic form to the State Water Board's (SWB) GeoTracker website in accordance with California Code of Regulations, Title 23, Chapter 30, Division3, Article 2, Section 3892 and Chapter 16, Article 11, Division 3.

Leaking Underground Fuel Tank (LUFT) Cases

Reports and deliverable requests are pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party (RP) in conjunction with an unauthorized release from a petroleum underground storage tank (UST) system.

Site Cleanup Program (SCP) Cases

For non-petroleum UST cases, reports and deliverables requests are pursuant to California Health and Safety Code Section 101480.

ELECTRONIC SUBMITTAL OF REPORTS

A complete report submittal includes the PDF report and all associated electronic data files, including but not limited to GEO_MAP, GEO_XY, GEO_Z, GEO_BORE, GEO_WELL, and laboratory analytical data in Electronic Deliverable Format™ (EDF). Additional information on these requirements is available on the State Water Board's website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

- Do not upload draft reports to GeoTracker
- Rotate each page in the PDF document in the direction that will make it easiest to read on a computer monitor.

GEOTRACKER UPLOAD CERTIFICATION

Each report submittal is to include a GeoTracker Upload Summary Table with GeoTracker valid values[1] as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sample Period	PDF Report	GEO_ MAPS	Sample ID	Matrix	GEO _Z	GEO _XY	GEO_ BORE	GEO_WEL L	EDF
2016 Subsurface Investigation Report	2016 S1	✓	✓	Effluent	SO	☐	☐	☐	☐	✓
2012 Site Assessment Work Plan	2012	✓	✓			☐	☐	☐	☐	☐
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	☐	☐	☐	✓
				SB-10-6	SO	☐	☐	☐	☐	✓
				MW-1	WG	✓	✓	✓	✓	✓
				SW-1	W	✓	✓	✓	✓	✓

[1] GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions, CA State Water Resources Control Board, April 2005

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** NA
	ISSUE DATE: December 14, 2017
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016
SECTION: ACDEH Procedures	**SUBJECT:** Responsible Party(ies) Legal Requirements / Obligations

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to the State Water Board's GeoTracker website." This letter must be signed by the Responsible Party, or legally authorized representative of the Responsible Party.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately licensed or certified professional and include the professional registration stamp, signature, and statement of professional certification. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: http://www.bpelsg.ca.gov/laws/index.shtml.

UNDERGROUND STORAGE TANK CLEANUP FUND

For LUFT cases, RP's non-compliance with these regulations may result in ineligibility to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse the cost of cleanup. Additional information is available on the internet at: https://www.waterboards.ca.gov/water_issues/programs/ustcf/

AGENCY OVERSIGHT

Significant delays in conducting site assessment/cleanup or report submittals may result in referral of the case to the Regional Water Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.