



**Jared Blumenfeld**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Meredith Williams, Ph.D., Director  
9211 Oakdale Ave.  
Chatsworth, CA 91311



**Gavin Newsom**  
Governor

March 19, 2021

RESPONSE TO PUBLIC COMMENTS ON THE REMOVAL ACTION WORKPLAN AND THE NEGATIVE DECLARATION FOR UNION PACIFIC RAILROAD BEVERLY HILLS SITE, 9315 CIVIC CENTER DRIVE, BEVERLY HILLS, LOS ANGELES COUNTY (SITE CODE: 301247)

Dear Community Member:

Enclosed is the Department of Toxic Substances Control (DTSC) response to comments received during the public comment period for the Union Pacific Railroad Beverly Hills (Site) project that extended from September 23, 2020 to October 22, 2020 for the subject documents.

The subject Removal Action Workplan (RAW) presents and describes environmental investigation, characterization the Site has undergone and proposes future removal actions to be considered. The Negative Declaration evaluates environmental impacts during removal action implementation.

DTSC approved the RAW and the Negative Declaration on January 27, 2021 and a Notice of Determination pursuant to the California Environmental Quality Act (CEQA) for the Negative Declaration was filed with the State Clearing House.

The RAW and the Negative Declaration will be available to the public through links, [https://www.envirostor.dtsc.ca.gov/public/community\\_involvement/3358319938/Union%20Pacific%20Railroad%20Beverly%20Hills%20Final%20Complete%20RAW%20022221.pdf](https://www.envirostor.dtsc.ca.gov/public/community_involvement/3358319938/Union%20Pacific%20Railroad%20Beverly%20Hills%20Final%20Complete%20RAW%20022221.pdf)

and

[https://www.envirostor.dtsc.ca.gov/public/community\\_involvement/9044706046/Union%20Pacific%20Railroad%20Beverly%20Hills%20Negative%20Declaration\\_01%2029%2021%20Signed.pdf](https://www.envirostor.dtsc.ca.gov/public/community_involvement/9044706046/Union%20Pacific%20Railroad%20Beverly%20Hills%20Negative%20Declaration_01%2029%2021%20Signed.pdf)

Please contact Sara Vela, the Project Manager, at (818) 717-6618, or email at [sara.vela@dtsc.ca.gov](mailto:sara.vela@dtsc.ca.gov) if you should have questions.

Response to Public Comments  
Union Pacific Railroad Beverly Hills – RAW and Negative Declaration  
March 19, 2021  
Page 2

Sincerely,

A handwritten signature in blue ink, appearing to read "H. Salloum", with a long horizontal flourish extending to the right.

Haissam Y. Salloum, P.E.  
Branch Chief  
Site Mitigation and Restoration Program – Chatsworth



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9211 Oakdale Avenue  
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Governor

January 27, 2021

### RESPONSE TO PUBLIC COMMENTS ON UNION PACIFIC RAILROAD BEVERLY HILLS REMOVAL ACTION WORKPLAN AND CALIFORNIA ENVIRONMENTAL QUALITY ACT NEGATIVE DECLARATION

#### **Comment #1 – Rose Norton**

As a 63-year resident of the City and a former chair of the Beverly Hills Planning Commission, I object in the strongest manner to disturbing and excavating the arsenic-poisoned land under the former train tracks on Santa Monica Boulevard.

The Beverly Hills Land Company illegally cut the trees in 2015 and scattered toxic dust on the adjacent neighborhood. This violation is noted in the State files. The residents do not trust them to do the right thing.

Of the available options, I would like to recommend capping the soil with asphalt and/or leaving it alone -- Option 4.1.2.

Any proposal to transport over 1,320,000 pounds (6,600 tons) of toxic soil through our neighborhoods is unacceptable.

This is a railroad track easement, it is insufficient for an industrial office complex of 11 over-code scaled buildings proposed for this barely accessible site.

I strongly object to any development on the toxic site.

#### ***Response to Comment #1:***

The purpose of the RAW is to address environmental cleanup of the site and not potential development. Alternative 5 (Excavation with Offsite Disposal during Development) has been recommended because it removes the contaminated soil and places controls on the use of the property to reduce potential exposure to deeper contaminated soil and is therefore the most protective alternative evaluated.

Contaminated soil will be transported in a manner that minimizes disturbance to the community in accordance with city and state *requirements*.

### **Comment #2 – Mike D. Weiner and Shari Weiner**

I am writing in reference to the proposed development project on the Union Pacific Railroad Beverly Hills site located at 9101 to 9350 N Santa Monica Boulevard and 9100 to 9349 Civic Center Drive. I currently own condominiums on North Oakhurst Drive as principal residences for my family between Beverly Boulevard and Civic Center Drive and have serious concerns on increased traffic as well as safety and the potential adverse effects on our property values that would undoubtedly result from the proposed development project including low income housing. While there are certainly apartments in the neighborhood, we purchased our properties on their inclusion within Beverly Hills for safety and schooling as well as eventual property valuation and appreciation. The proposed development will bring much more density as well as unsupportable and quite frankly, untenable demands on our public services – this is not in keeping with the values of Beverly Hills or which we pay substantial taxes. Both of Beverly Boulevard and Santa Monica Boulevard are already very congested thoroughfares and developing this 5+ acre site with its accompanying traffic and density will only make matters worse, let alone on the surrounding neighborhood streets, including Civic Center Drive which currently is a closed cul-de-sac; opening the west-end to Beverly Boulevard will result in substantial unintended pass-through traffic impairing safety and the nature of our neighborhood. The demands are not supportable by our infrastructure. This development project is short-sided and is purely an attempt by the landowner to attempt to realize value irrespective of the consequence to the neighborhood. Enough. There is already substantial ongoing development underway now, including the condominium developments on North Palm and Beverly Boulevard, on North Oakhurst and Civic Center Drive, on each of Oakhurst, Palm and Maple between Burton Way and Beverly Boulevard, on Beverly Boulevard east of Doheny, on Doheny north and south of Beverly Boulevard, and at the Four Seasons Residences. This Project should not be approved and especially so without fulsome environmental impact studies, including expected ingress and egress streets. Its negative effects will reach into the neighborhoods south of Santa Monica Boulevard as well as the “flats” north of the Boulevard.

#### ***Response to Comment #2:***

The purpose of the RAW is to address environmental cleanup of the site and not potential development as detailed in our response to Comment #1.

### **Comment #3 – Steve Mayer**

Please permit this communication to provide public comment upon the Union Pacific Railroad site (Lots 12 & 13), relative to the draft Negative Declaration, Initial Study and the draft Removal Action Work Plan:

#### ***Summary***

(1) What is clear is that at least one public hearing should be held. A second public hearing involving the City of Beverly Hills City Council should also be held

(2) None of the alternatives involve the complete removal of all contaminants,

no matter how deep. That is the only solution that is acceptable to many residents in Beverly Hills.

(3) It is not clear if the Agency sent Public Notice to the petitioners from 2015, as submitted by Lionel Ephraim.

(4) It is not clear why Union Pacific Railroad is now proceeding when the development plans of the current landowner are under review by the City of Beverly Hills.

The current proposed development plans will likely involve two levels of subterranean parking. Would Union Pacific Railway be responsible for full remediation? If not, why not?

(5) The draft Negative Declaration does not allow single-family residential development, but does allow multi-family residential development. There is no explanation for that inconsistency. The most pressing need for the City of Beverly Hills, per State of California edict, is affordable housing. Lots 12 & 13 are some of the few remaining parcels in the City that can accommodate such state requirements. If senior congregate housing was developed, how would those seniors be safe if a single-family homeowner would be at risk?

(6) One of the developer's future options could be to sell office condominium units in a Creative Office campus. How would the ultimate unit holders be protected by Union Pacific Railroad, if the containments migrated closer to the surface?

(7) Another of the developer's option is to donate Lot 13 to the City of Beverly Hills for park use and/or other uses. Why was there not any "Proposed Sampling Grids" in the "Figures" section of Lot 13 in the proposed RAW? How can the public approve the RAW if there is no information regarding Lot 13? Also, should not the potential use of Lot 13 be of concern to the Union Pacific Railroad? For decades, people utilized Lot 13 as a recreation location for walking their dogs or personal walks. Why has not Union Pacific Railway assessed if such users were exposed, and determined its liability, and why has it not been included in the draft RAW?

### ***Initial Study***

The Initial Study is invalid, due to at least **16** errors from incorrect or broken hyperlinks. Some will question whether the Preparer or the Branch Chief actually reviewed the references, thereby invalidating the Certification on Page 41.

*"Certification: I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this initial study evaluation to the best of my ability and that the facts, statements and information presented are true and correct to the best of my knowledge and belief."*

At the least, the Initial Study must be corrected and re-noticed.

The specifics are:

On page 7, the link to the “City of Beverly Hills 2010, General Plan” generates an error message of “Page Not Found”.

On Page 15, the link to the “Final Program EIR for the City of Beverly Hills, Community Development. Section 5.5” generates an error message of “Opps! That Page Can’t Be Found.” The website is not the City’s website.

On Page 16, the link to the City of Beverly Hills Zoning Map” generates an error message of “404 Not Found”.

On Page 18, the link to the “Community Development Plan For the City of Beverly Hills” generated an error message of “Hmm. We’re having trouble finding that site. We cannot connect to the server at [www.ci.beverlyhills.ca.us](http://www.ci.beverlyhills.ca.us).”.

On Page 18, the link to the “City of Beverly Hills Community Development Site” generated an error message of “Opps! That Page Can’t Be Found.” The website is not the City’s website.

On Page 18, the link to the “Significant Historical Properties In the City of Beverly Hills” generated an error message of “Opps! That Page Can’t Be Found.” The website is not the City’s website.

On Page 20, the link to the City of Beverly Hills GoZone Map” generates an error message of “404 Not Found”.

On Page 25, the link to the City of Beverly Hills Zoning Maps” generates an error message of “404 Not Found”.

On Page 25, the link to the “City of Beverly Hills, Traffic Plan” generated an error message of “Hmm. We’re having trouble finding that site. We cannot connect to the server at [www.ci.beverlyhills.ca.us](http://www.ci.beverlyhills.ca.us).”.

On Page 29, the link to the City of Beverly Hills Zoning Maps” generates an error message of “404 Not Found”.

On Page 31, the link to the “Final Program EIR for the City of Beverly Hills, Community Development. Section 5.6, Noise” generates an error message of “Opps! That Page Can’t Be Found.” The website is not the City’s website.

On Page 31, the link to the “City of Beverly Hills Noise Ordinance” generated an error message of “System Message. Unable To Load File.”

On Page 33, the link to the “City of Beverly Hills, Public Facilities” generated an error message of “Hmm. We’re having trouble finding that site. We cannot connect to the server at [www.ci.beverlyhills.ca.us](http://www.ci.beverlyhills.ca.us).”

On Page 35, the link to the “City of Beverly Hills, Traffic Plan” generated an error message of “Hmm. We’re having trouble finding that site. We cannot connect to the server at [www.ci.beverlyhills.ca.us](http://www.ci.beverlyhills.ca.us).”

On Page 37, the link to the “Significant Historical Properties In the City of Beverly Hills” generated an error message of “Opps! That Page Can’t Be Found.” The website is not the City’s website.

On Page 39, the link to the “City of Beverly Hills, Traffic Plan” generated an error message of “Hmm. We’re having trouble finding that site. We cannot connect to the server at [www.ci.beverlyhills.ca.us](http://www.ci.beverlyhills.ca.us).”

### **Negative Declaration**

To begin, on Page 1, Paragraph 3, it concludes with:

*“... prohibits the use of the property as a single-family residences, hospital, school, daycare center and limit the Site use to commercial, multi-use, and multiple unit housing purposes.”*

One either has residential use or not. If the remediated site is not suitable for “single family residences,” why is it compatible for “multiple unit housing purposes.”

What has been proposed by BHLC is “creative office” that would involve excavation of multiple levels of contaminated soil. Last, even though this is a draft document, where are the “Figures” (i.e. Figure 1 – Site Location and Figure 2 - Site Map)? What else is missing?

### **Response to Comment #3:**

#### **Summary**

1. Thank you for your comment. The DTSC did not conduct a public hearing based on the lack of interest in project. The limited interest is memorialized by a survey that was conducted in August 2019, previous public engagement initiatives and this public comment period. Details of each can be found in our database [https://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=19400017&mytab=activities](https://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=19400017&mytab=activities). DTSC is committed to facilitating transparency by providing access to information and project staff. Please contact the public participation specialist, Chinh Sheow at e-mail [Chinh.Sheow@dtsc.ca.gov](mailto:Chinh.Sheow@dtsc.ca.gov) if you have any questions.
2. The recommended remedy includes a combination of removal of contaminated soil and institutional controls to reduce potential exposure to remaining contaminated soil. Contaminated soil will be removed up to 2 feet below ground surface (bgs). Institutional controls will be established reducing potential exposure to remaining contaminated soil beneath 2 feet bgs. This approach balances reducing potential exposure to arsenic while minimizing the impacts to the community.
3. Regarding 2015 activity for public notice, the DTSC published a Public Notice in the Beverly Hills Courier newspaper at the start of the comment period. At the same time, a Community Update was mailed to the 1,342 recipients of the mailing list. The mailing list consists of the addresses within a ¼ mile of the Site as well as any person or organization who contacted DTSC requesting to be put on the mailing list. While UPRR retains responsibility for environmental cleanup of the site, they do not own the property. Therefore, environmental cleanup is being conducted separately from potential development proposed by the property owner. The recommended remedy (Alternative 5) proposes excavation during development if potential development is scheduled during a similar timeframe. However, remedial implementation is intended to be conducted regardless of any approved development plans and would not be delayed to align with the construction schedule for potential development. Any remediation associated with potential development of the site outside of the identified removal areas will be conducted as part of those development activities.

4. The Negative Declaration neither allows or disallows certain types of development of the site. The remedy includes institutional controls, including a Land Use Covenant executed by DTSC to prohibit the use of the property for single-family residences, hospital, school, and daycare center and limits the Site use to commercial, multi-use, and multiple unit housing purposes. These land use types have lower risk than single-family residences that can be managed using other institutional controls such as prohibition of soil disturbance below 2 feet bgs.
5. Residual arsenic in soil beneath 2 feet bgs is unlikely to migrate to the ground surface, because there are no natural mechanisms for this type of migration.
6. As shown in 2-1b-d of Appendix F, sampling is proposed within Lot 13.

### **Initial Study**

The hyperlinks will be revised.

### **Negative Declaration**

The Negative Declaration neither allows or disallows certain types of development of the site. The Negative Declaration describes the reasons why the proposed environmental cleanup project will not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report. The remedy includes institutional controls, including a Land Use Covenant executed by DTSC to prohibit the use of the property for single-family residences, hospital, school, and daycare center and limits the Site use to commercial, multi-use, and multiple unit housing purposes. These land use types have lower risk than single-family residences that can be managed using other institutional controls that would regulate potential soil disturbance below 2 feet bgs.

### **Comment #4 – Brooks Yang, Beverly Hills, CA**

As someone who lives very close to this site and often walks my dog along Civic Center Drive, I'm very happy to see the proposed RAW put forward. I fully support an effort to clean up the land. Thank you.

*Response to Comment #4:*  
Comment noted.

### **Comment #5 – Barry S. Rubin, Beverly Hills, CA**

My comment regarding the above RAW is to request that whichever plan is adopted insure and guarantee that the environment, the land, the adjacent properties and area remain safe, protected and free from pollution, contamination and all known hazards and are in full compliance with and to the strictest safety standards applicable to such a project.

*Response to Comment #5:*

Thank you for your comment. The DTSC understands your concern and will keep the community updated through Envirostor on the DTSC public website.

**Comment #6 – Dr. Philip H. Ruben, Beverly Hills, CA**

I walk around that area all the time. I am highly sensitive to all of those poisons in the soil and the dust.

**Response to Comment #6:**

Thank you for your comment. The DTSC understands your concern and will keep the community updated through Envirostor on the DTSC public website.

**Comment #7 – Phil Savenick**

As a homeowner, I am very concerned about disturbing the toxic site on Santa Monica Boulevard. The Beverly Hills Land Company illegally clear cut the trees in October of 2015 thus spewing toxic dust on the neighborhood.

They are not trustworthy.

I would like to recommend capping the soil with asphalt and leaving it a transportation zone. Option 4.1.2

The idea of over 300 dump truck loads containing 6,600 tons of toxic soil being excavated and driven through our neighborhoods presents an unacceptable risk.

In our present economy, there is no need for an industrial office complex of 11 buildings to be built on a barely accessible site.

I firmly object to any development on the toxic site.

**Response to Comment #7:**

The purpose of the RAW is to address environmental cleanup of the site and not potential development. Removal of contaminated soil reduces potential exposure of residual arsenic in soil to 2 feet bgs, which is more protective to the community compared to capping.

**Comment #8 – Dr. William Brenner, Beverly Hills, CA**

I have been a BH resident and taxpayer since 1976. The scandal of this site was and still is Beverly Hills's "Mulholland Drive." Urban corruption on a large scale. The developer and the City's employees and politicians were complicit. The site should be a public park or a dog park, not a reward for the developer.

**Response to Comment #8:**

The purpose of the RAW is to address environmental cleanup of the site and not potential development.

**Comment #9 – Bruce Howard, Beverly Hills Land Company Attorney**

The Beverly Hills Land Company ("BHLC") owns the property addressed in the proposed Removal Action Work Plan ("RAW") for the Beverly Hills Lots 12 and 13. These are our comments on the current draft of the RAW.

The RAW proposes, as part of the remedy, to impose institutional controls on the property. The proposed institutional controls would limit future uses of the property and would make the BHLC and persons obtaining, buying and leasing the property from BHLC responsible for the management of the contamination deposited at the property by Union Pacific. Such institutional controls may not imposed without the express, written consent of the landowner. BHLC does not agree and has never agreed to the institutional controls contained in the RAW or any other institutional controls that would limit the use of the property.

**Response to Comment #9:**

The proposed remedy in the RAW considers site specific target goals to prevent potential exposures to arsenic on the surface and shallow surface of the property. Deeper contaminated soil can be managed in place with institutional controls or may be removed in the future if needed. California Code of Regulations Section 67391.1 requires that land use covenants (LUC) are recorded when hazardous substances will remain at the property at levels which are not suitable for unrestricted use of the land. Subsequent mitigation measures or remediation goals may be proposed to amend or eliminate an LUC to meet specific land use requirements.

**Comment #10 – David Yelton, CBO, Deputy Building Official, Beverly Hills, CA**

On August 4, 2020 the City of Beverly Hills submitted its peer review consultant Lindmark Engineering's review of Jacobs's December 2019 removal action work plan (RAW) for Lots 12, 13 and 13A to the DTSC. Last month Jacobs issued a revised RAW dated September 18, 2020, and DTSC issued a CEQA Initial Study dated September 15, 2020. Attached are Lindmark's reviews of these documents. Most references cited are hyperlinked in the reports. The documents which are not hyperlinked and for which pdfs exist are attached in respective RAW and CEQA folders. Also included is a cover letter signed by David Yelton, Deputy Building Official that conveys the files to the DTSC.

**Lot 13A**

The RAW does not refer to the lot located on the island west of Doheny Drive as Lot 13A but calls it the *Triangle Section*. However, the entire island, composed of Lot 13A and the adjoining City-rights-of-way, is roughly shaped as a triangle while Lot 13A is composed of two triangles and one rectangle. The RAW is not proposing to further investigate the City rights-of-way on the island, but only Lot 13A. Therefore, the term *Triangle Section* is misleading.

**Topography**

The topographic slope across the site is to the southeast (USGS, 1995) which is also the prevailing flow direction of shallow perched groundwater in the site vicinity (Lindmark, 2002a); (Lindmark, 2002b).

**Historic Site Use**

A railroad was operated on the site from approximately 1909 to 1954 when passenger service ended (Wikipedia-Pacific Electric-Beverly Hills). A photograph from circa 1910

shows Beverly Hill's first train station located on the southwest corner of Santa Monica Boulevard and Canon Drive (Water and Power Associates). Freight service continued past 1954, but in the 1960s all service ended, and the railroad was removed (LE, 2017). Photographs of the railroad illustrating the tracks and freight and passenger operations are contained in Attachment B.

### **Source of Arsenic Contamination**

The source of the arsenic contamination detected in soil at the site is not unknown, or associated with import fill, but is from historic applications of sodium arsenite which was sprayed on the tracks and the railroad right-of-way using tank cars. According to an October 10, 1928 article in the Pacific Electric Magazine (Attachment C), weed killing using water-soluble sodium arsenite was the more economical weed destroyer at that time which coincides with the time of railroad operations at the site. Sodium arsenite is freely soluble in water (NCBI) and therefore arsenic in a liquid solution would percolate through the soil.

Interestingly, the 1928 article discusses the emerging use of diesel fuel as a weed killer with one of the benefits being the settling of dust. Diesel fuel was probably later used at the site as there is evidence of dark staining on the railroad right-of-way, see Photo 1, Attachment B. Unlike arsenic, which is persistent in the subsurface, diesel fuel applied at the ground surface would tend to degrade over time.

### **Limitations of Investigatory Data used by the RAW**

The RAW is based on the evaluation of arsenic soil sampling data obtained from 1998 to 2007 and groundwater data from 1998 to 2010. The soil samples were almost exclusively taken from within the boundaries of the site. The locations of soil samples collected through 2007 with detected arsenic concentrations, and proposed excavations, are shown on Jacobs's figures contained in Attachment A. The RAW does not refer to CH2M Hill's (CH2M) 2015 Removal Action Work Plan (CH2M, 2015), but many sections of the RAW appear to be copied from this 2015 removal action work plan.

Between 2015 and 2018, a large number of soil samples were collected at the ground surface and at 0.5 and 2 feet bgs by Rincon Consultants and LE. The assessments are presented in reports listed in the reference section. The sample locations are shown on Figures LE5a through LE5d contained in Attachment D. LE believes an incorporation of these data into the RAW would have revealed that the approach to remediate the arsenic investigation as outlined in the RAW would be inadequate.

### **Arsenic Leachability**

The RAW states STLC analyses of soil have shown arsenic not to be leachable and has not impacted groundwater. The RAW further states that arsenic in soils is not migrating from the shallow soils and the centerline of the site. However, the above referenced STLC analyses were run on samples containing a maximum of 90.5 mg/kg arsenic. The maximum concentration of arsenic detected to date at the site (996 mg/kg) is an

order of magnitude greater. This maximum concentration was detected at 2 feet bgs in A18 located near the east end of Lot 13 (Figure 5d).

In 2016, LE analyzed five soil samples with arsenic concentrations ranging from 53.8 to 123 mg/kg for STLC (LE, 2016). The sample with the highest arsenic concentration (C19) had an STLC of 7.13 milligrams per liter (mg/L). Since that concentration exceeded 5 mg/L it would designate any excavated soil at that specific location and depth as a hazardous waste and further indicate that the arsenic is leachable. Sample C19 was collected from the surface of the soil at an approximate depth of 0.1 feet bgs in an area on Lot 12 (Figure LE5b), inside the curb west of Beverly Boulevard which was deemed to be free of contamination in the RAW and not proposed to be excavated.

In Table 1, contained in Attachment E, LE used linear regression to find the best fitting straight line through the points with total arsenic in mg/kg on the x-axis and the STLC values (mg/L) on the y-axis. The fitted line has a strong correlation (0.854) and the 5 mg/L STLC value is intersected by a total concentration of 112.8 mg/kg. Based on 95 percent confidence, an arsenic concentration less than 104.4 mg/kg would not have an STLC of 5 mg/L while a concentration over 121.2 mg/kg with 95 percent confidence would exceed 5 mg/L. Theoretically, an arsenic concentration of 50 mg/kg could have an STLC of 5 mg/L, and would need to be tested for waste profiling purposes, but LE will assume that an arsenic concentration of 121.2 mg/kg or greater will have an STLC above 5 mg/L that would designate any profiled soil as hazardous.

The soil analytical data for SB02 drilled in 2006 and located near the western end of Lot 12 (Figure 5a) show the presence of elevated arsenic concentrations (152 mg/kg) into the native soil at a depth of 30 feet bgs which indicates vertical migration. This sample was not STLC tested but the elevated concentration suggests a probable exceedance of 5 mg/L if it had been STLC tested. A sample collected at 10 feet bgs in this boring had an even higher arsenic concentration (160 mg/kg) but was also not STLC tested. The samples from this boring that were STLC tested were collected from 2 and 5 feet bgs and had a maximum concentration of only 29.5 mg/kg. This concentration is below the minimum concentration (50 mg/kg) that could render the soil as hazardous based on STLC testing and therefore there was no need to STLC test those samples but the samples with the higher concentrations should have been STLC tested.

### **Distribution of Arsenic in Soil**

The conceptual site model presented in the RAW assumes there were no railroad operations and that arsenic was brought to the site in fill material. Based on these assumptions, and other assumptions mentioned above, the remediation options were evaluated and one selected, *Excavation with Off-Site Disposal during Development*.

Based on LE's evaluation of the historic operations, there were two parallel tracks for westbound and eastbound traffic, see photographs in Attachment B. Therefore, the spaying of water soluble sodium arsenite from the tank cars would likely have occurred from both tracks and would have been distributed a distance away from the tracks.

Furthermore, LE believes after the dirt near the tracks had dried out, dust would be generated that would spread the arsenic farther away, including off-site.

Based on LE's dust monitoring in the area, the prevailing wind direction is to the northeast. However, the worst-case scenario for dust migration would likely occur during Santa Ana conditions when the prevailing wind direction is to the southwest. LE believes, this may, at least in part, explain the greater distribution of arsenic to the south of the site compared to the north.

### ***Ground Surface to 5 Feet Below Ground Surface***

The RAW assumes arsenic concentrations detected at 2 feet bgs belong to the depth interval 2 to 5 feet bgs even if there were no sample data collected above 2 feet bgs. LE believes concentrations detected at 2 feet bgs are not necessarily only representative of soils below 2 feet bgs, but there is an equal chance a concentration at 2 feet bgs would be similar to a concentration at 1.99 feet bgs or 2.01 feet bgs. As an example, the western end of Lot 12 is not designated for excavation of arsenic-impacted soil due to arsenic concentrations at 2 feet bgs in LE1, SB3 and SB1 at 36.2 mg/kg, 44.9 mg/kg and 37.4 mg/kg, respectively, which are attributed in the RAW to soils below 2 feet bgs. However, a surface soil sample collected from approximately 0.1 feet bgs in C1, approximately 20 feet west of LE1 (Figure LE5a), had an arsenic concentration of 53.8 mg/kg and, therefore, the soils in the western end of Lot 12 should be excavated since shallow arsenic concentrations in that area are elevated, above the 25 mg/kg action level.

The great variability in arsenic concentrations laterally and vertically in shallow soil is also illustrated by the data for the eastern end of Lot 12 (Figure 5b) which is also not designated for excavation in the RAW. Although the arsenic concentrations in A6 at 0.5, 2 and 5 feet bgs were below 25 mg/kg, they were above 25 mg/kg in nearby surface soil samples, RS18 (56.3 mg/kg) and C19 (123 mg/kg), see Figure LE5b. Furthermore, the arsenic concentration in C19 was hazardous (LE, 2016).

In Lot 13, no excavation is proposed at LE16 near the west end of Lot 13 (Figure 5b) where the arsenic concentration at 2 feet bgs was 107 mg/kg, because it was assumed, without basis, that the soil above would have a concentration less than 25 mg/kg. Several other similar examples exist in the RAW where the soil is not proposed to be excavated.

The areas of LE7, 150 feet west of Elm Drive, (Figure 5a) and LE11, 100 feet west of Maple Drive, (Figure 5b) which had arsenic concentrations of 196 mg/kg and 168 mg/kg, respectively, at 2 feet bgs were also not proposed for excavation although the soil would likely have been designated as hazardous if it had been tested. Although no sample was taken above 2 feet bgs in LE7, the RAW assumes this soil has a concentration below 25 mg/kg and will be left as a 2-foot cover on top. Since 196 mg/kg is above the 75 mg/kg action level from 2 to 5 feet bgs (for landscape areas) the RAW assumes the existing soil above 2 feet bgs will serve as a cover and the soil from 2 to 5

feet will be managed by a deed restriction and would require soil management in case it is disturbed.

Except for the 40-foot wide Lot 13A, located within the island east of Lot 13, the site is 60 feet wide. However, as mentioned earlier there were two parallel tracks for eastbound and westbound traffic. Therefore, the centerline of the site will be between the two tracks and not at the centerline of a single track. As a consequence, the distribution of arsenic will be greater across the width of the site than if it had been a single track. Based on supplemental arsenic results discussed above and the arsenic results for five columns of step-out borings across the site: A31 through A32 (in Lot 12), A38 through A37 (in Lot 12), A43 through A44 (in Lot 13), A49 through A48 (in Lot 13), and A55 through A56 (in Lot 13A), LE believes the entire site is likely impacted above a concentration of 25 mg/kg down to 2 feet bgs and a significant portion of the site has arsenic concentrations above 75 mg/kg from 2 feet to 5 feet bgs, see table below.

<b>Sample Step-Out Borings</b>	<b>0-2 feet bgs &gt; 25 mg/kg No. Samples/Total Samples</b>	<b>2-5 feet bgs &gt; 75 mg/kg No. Samples/Total Samples</b>
<b>Lot 12</b> A31-A29-A27-A21-LE2-A28- A30-A32	12/14 (85.7%)	8/14 (57.1%)
<b>Lot 12</b> A38-A35-A34-LE12-A33-A36- A37	8/13 (61.5%)	3/14 (21.4%)
<b>Lot 13</b> A43-A41-A39-LE20-A23-A40- A42-A44	11/14 (78.6%)	9/14 (64.2%)
<b>Lot 13</b> A49-A47-A45-LE23-A24-A46- A48	11/11 (100.0%)	6/12 (50.0%)
<b>Lot 13A</b> A55-A53-A51-LE36-A26-A52- A54-A56	11/14 (78.6%)	4/14 (28.6%)

Arsenic contamination above the 25 mg/kg action level in shallow soil also extends off-site. As mentioned earlier, an elevated arsenic concentration was detected in C1 at 0.1 feet bg. C1 was taken from the City right-of-way west of Lot 12. Therefore, this right-of-way, which was used for railroad operations, is impacted by arsenic contamination above the 25 mg/kg action level.

Based on the sampling done for the eucalyptus grove in the City right-of-way south of Lot 13 in 2018 (LE, 2019), the arsenic concentrations in samples collected at 2 feet bgs ranged from 6.41 mg/kg to 88 mg/kg with a mean concentration of 22.2 mg/kg and a 95 percent upper confidence limit (UCL) of 27.9 mg/kg. Elevated arsenic concentrations were found to extend at least 10 feet south of Lot 13. The soil waste profile sample had an arsenic concentration of 21.1 mg/kg (Lindmark, 2019). No arsenic northeast from Site No. 51 (Figure LE5d). Also, the City right-of-way immediately north of Lot 13A has not been tested for arsenic.

There is little arsenic data for the proposed subterranean parking extension on Lot 12, 23 feet south of the property line. Because this area is outside the railroad right-of-way immediately north of Lot 13A has not been tested for arsenic. There is little arsenic data for the proposed subterranean parking extension on Lot 12, 23 feet south of the property line. Because this area is outside the railroad right-of-way, the arsenic impact will likely be limited to shallow soil. Two borings, BK-1 and BK-2, were drilled on Civic Center Drive close to the 23-foot extension line (Figure 5a). The arsenic concentrations ranged from 17.4 mg/kg to 27.3 mg/kg with the highest concentration detected in BK-1 at 2 feet bgs. Based on data south of Lot 13, the arsenic concentrations decrease with distance away from the former railroad-right-of-way, and this will likely also be the case for the area south of Lot 12.

**5 Feet Below Ground Surface to 50 Feet Below Ground Surface**

Since soil will be excavated to a depth of approximately 25 feet bgs within Lot 12, the concentrations of arsenic with depth is of importance and are summarized in the table below.

<b>Lot 12 – Arsenic Concentrations in Soil at 5 feet bgs and Below</b>			
<b>Depth (feet)</b>	<b>No. Samples</b>	<b>Mean Concentration (mg/kg)</b>	<b>Concentration Range (mg/kg)</b>
5	67	32.1	10-203
10	10	37.1	18.7-160
15	6	14.9	5.03-21.9
20	9	13.5	7.2-17.0
25	5	14.5	12.3-16.4
30	7	36.0	9.5-152
35	5	14.1	10.3-18.0
40	7	16.5	11.3-25.7
45	5	17.3	14.5-20.0
50	7	15.0	12.9-18.5

Although there are fewer samples that have been collected below 5 feet than at 5 feet, there does not appear to be a significant reduction from 5 to 10 feet bgs, and at 30 feet bgs the mean concentration increases to 36.0 mg/kg from 14.5 mg/kg at 25 feet. This increase results from the high concentration of 152 mg/kg in one sample taken at 30

feet bgs but indicates that high concentrations, that would likely designate soil as hazardous, persist to greater depths.

The concentrations of arsenic with depth for Lot 13 and 13A are summarized in the table below.

<b>Lot 13 and 13A – Arsenic Concentrations in Soil at 5 feet bgs and Below</b>			
<b>Depth (feet)</b>	<b>No. Samples</b>	<b>Mean Concentration (mg/kg)</b>	<b>Concentration Range (mg/kg)</b>
5	99	33.0	2.4-336
10	14	12.5	6.54-21.6
15	9	6.9	1.98-10.7
20	9	16.8	3.1-51.9
25	4	16.7	10.2-22.1
30	7	15.1	12.1-24.5
35	5	16.0	12.7-20.1
40	3	19.4	17.9-28.3
45	4	23.0	11.3-43.2

The average concentrations at depth are similar to those below Lot 12. The increase in arsenic concentrations from 30 feet bgs at 5-foot increments to 45 feet bgs indicate vertical migration through the soil which appears to have impacted groundwater.

### **Railroad Ballast**

Based on boring logs, gravel base materials were found below the surface at SB10 (1 foot thick) and SB11 (1.5 feet thick) in Lot 13, Figure 5d. SB10 and SB11 were approximately drilled 20 feet apart. LE believes the gravel is likely associated with ballast installed for the two tracks. Therefore, the gravel at SB10 would represent ballast for the northern track and the gravel at SB11 ballast for the southern track. Therefore, the centerline of the site would likely not be the centerline of one of the tracks, but between the two tracks. LE believes the arsenic water solution would have quickly penetrated through the gravel into the underlying soil. When railroads are abandoned, the spurs and ties are typically removed, but the ballast left in place. Although the ties typically would be removed, remnants of ties such as pieces of wood and metals may be encountered.

Based on an Internet search, the standard railroad gauge was 4 feet 8.5 inches or 4.7 feet (Wikipedia- Pacific Electric). As the ballast had to support the spurs and ties, the width of the ballast would reasonably be about 6 feet and the volume of gravel beneath the site would, therefore, be approximately 1,900 cubic yards assuming an average thickness of 1.25 feet, a width of 6 feet and a length of 3,400 feet per track.

### **Groundwater Condition**

The RAW does not address the groundwater sampling in 2006 and 2008 by CH2M. In 2006, CH2M obtained groundwater samples from four borings: SB1, SB5, SB8, and

SB11. The arsenic concentrations ranged from 10 micrograms per liter ( $\mu\text{g/L}$ ) to 35  $\mu\text{g/L}$  (CH2M, 2006). The highest concentration beneath Lot 12 was detected in SB5, 35  $\mu\text{g/L}$  at 54 feet bgs (Figure 5b), and the highest concentration beneath Lot 13 was detected in SB11, 20  $\mu\text{g/L}$ , at 35 feet bgs (Figure 5d). At that time (in 2006) the EPA Maximum Contaminant Level (MCL) was 50  $\mu\text{g/L}$ . Based on this MCL, the DTSC determined no remediation of groundwater was required (DTSC, 2008). On November 28, 2008, the MCL for arsenic was lowered to 10  $\mu\text{g/L}$ .

In October 2008, CH2M obtained groundwater samples from eight boreholes, No. 1 through No. 8, located onsite and offsite (CH2M, 2008a). The concentration of arsenic in groundwater ranged to 270  $\mu\text{g/L}$ . Based on groundwater elevation measurements taken from eight boreholes by CH2M in 2008 (CH2M, 2008a), the groundwater flow direction is shown to the northwest across Lot 12 and to the west-northwest across Lot 13. These flow directions are opposite of the topographical slope and prevailing shallow groundwater flow direction in the site vicinity. The gradient was approximately 1 percent which is a fairly steep gradient. The arsenic concentrations in groundwater beneath Lot 12 were 70  $\mu\text{g/L}$  (No. 1) and 270  $\mu\text{g/L}$  (No. 2) and beneath Lot 13, 140  $\mu\text{g/L}$  (No. 3) and 40  $\mu\text{g/L}$  (No. 4).

Groundwater samples were also collected and analyzed from boreholes north and south of Lots 12 and 13; however, no samples were collected immediately downgradient of the two hot-spots (No. 1 and No. 3).

In October 2008, the highest concentration detected north of the site was 5.3  $\mu\text{g/L}$  in No. 5 on Foothill Road, 450 feet northwest of Lot 12. The highest concentration south of the site was 22  $\mu\text{g/L}$  in No. 8, 300 feet southeast of Lot 13, on Oakhurst Drive. LE believes the arsenic concentration in No. 8 indicates probable movement of arsenic in groundwater from the site to the southeast based on the prevailing flow direction and suggest the finding of a reverse groundwater flow in 2008 (CH2M, 2008a) could have resulted from communication between the shallow groundwater and deeper, usable groundwater zones within which well 4 is perforated. LE found no soil sampling data for the eight boreholes. Arsenic sampling data would have been especially useful for the borings drilled off-site to establish background concentrations at depth. LE found no boring logs for No. 1 through No. 8.

Based on the arsenic data from the eight boreholes, CH2M prepared a work plan (CH2M, 2008b) to install five monitoring wells (MW-1 through MW-5). MW-2 and MW-4 were proposed to be located near the hot spots on Lot 12 and 13; however, only the two proposed wells near the hot spots were installed in 2009 and relabeled MW-1 and MW-2 (CH2M, 2009). LE found no boring logs for MW-1 and MW-2. MW-1 was located near the middle of Lot 12 (Figure 5a) in an area designated for excavation.

MW-2 was located near the middle of Lot 13 (Figure 5c) also in an area designated for excavation. The wells were sampled twice. The maximum total arsenic concentrations detected in MW-1 and MW-2 were 1.2  $\mu\text{g/L}$  and 4.1  $\mu\text{g/L}$ , respectively (CH2M, 2010). In the groundwater samples collected from MW-1 in October 2009, the dissolved

arsenic concentrations were higher than the total arsenic concentrations which should not be the case since the samples were filtered before the dissolved arsenic analyses. However, the report (CH2M, 2010) provided no explanation.

In the boring for MW-1, the maximum arsenic concentration in soil was 63 mg/kg at 0.5 feet bgs (see Figure 5a). From 10 feet bgs to 50 feet bgs in MW-1, the maximum arsenic concentration was 19 mg/kg (at 10 feet bgs). In the boring for MW-2 (see Figure 5c), the maximum arsenic concentration in soil, 350 mg/kg, was detected at 0.5 feet bgs. From 10 feet bgs to 35 feet bgs in MW-2 the maximum arsenic concentration was 21 mg/kg (at 30 feet bgs).

The wells were abandoned in 2010. CH2M's workplan (CH2M, 2008b) states "the monitoring wells will be abandoned in accordance with Los Angeles County and City of Beverly Hills well abandonment requirements". However, LE has not been able to obtain information regarding well sampling field records, well elevations and coordinates, groundwater elevations, well installation details, and permits for installation and abandonment. Since the wells were installed through highly arsenic-contaminated soil, the proper abandonment of the wells is of particular importance.

No groundwater elevation data for the wells were provided in the referenced reports LE reviewed. The assumption by CH2M was that the groundwater flow direction would be perpendicular to the centerline of the site and flow to the northwest. If that had been the case, the groundwater elevations in MW-1 and MW-2 would have been identical. However, at a minimum three wells are needed to locally establish a groundwater flow direction and gradient. Furthermore, as mentioned earlier, the assumed groundwater flow direction (northwest) is opposite of the topographical slope across the site and in the site vicinity.

In DTSC's letter approving the abandonment of the two wells (DTSC 2010), DTSC stated the site "had elevated levels of arsenic in soil down to groundwater". DTSC also stated that "hydropunch samples and the two rounds of well samples all show that arsenic in groundwater is below the allowed MCL of 10 µg/L". However, it should be noted that many hydropunch samples had arsenic concentrations above the MCL, ranging to 270 µg/L. Therefore, LE believes the hydropunch sampling results, 27 times higher than the MCL, did not justify the closure of the groundwater case for the site.

### **Water Supply Wells**

The RAW also does not address the four City water wells located in relative proximity to the site. The wells are used for drinking water production and are equipped by cement annular seals extending to 324 feet bgs. These seals are intended to work in conjunction with natural clay aquitards to prevent any potential vertical migration of contaminants downward toward the perforated intervals of these wells. Additionally, these wells extract their supply from the two deepest aquifers within the San Pedro Formation (Lindmark, 2002).

The nearest water supply well in the vicinity of the site is well 4 located north of North Santa Monica Boulevard, approximately 100 feet north of the site but not within 500 feet of the previous monitoring wells, MW-1 and MW-2. Well 4 is the City well with the historically highest arsenic concentrations detected. In 2008 the average arsenic concentration was 17.5 µg/L with a range from 15.7 µg/L to 18.2 µg/L (City, 2009). In 2018, well 4 was tested during rehabilitation (GTC, 2019). The testing was done in four zones and the results ranged from 8.6 µg/L to 11 µg/L. The report does not identify the specific depth intervals of each zone.

Based on a piloting report for the City's water treatment plant (Carollo, 2018), the highest mean arsenic concentration recorded in April 2016 (21.5 µg/L) was in well 4 which also had concentrations that exceeded the water quality objectives for total dissolved solids and manganese.

### **Applicable AQMD Rule**

Based on the arsenic concentrations, LE believes AQMD Rule 1466 *Control of Particulate Emissions from Soils with Toxic Air Contaminants* applies to this RAW and supersedes Rule 403 as the primary applicable AQMD rule. Rule 1466 was not mentioned in the December 2019 RAW, but is referenced in this revised version. Rule 1466 has much more rigorous requirements regarding notifications, training, monitoring and implementation than Rule 403 and will affect the scope, cost, and schedule of the soil removal action; however, the estimated cost of RAW implementation was not changed in this RAW.

### **Proposed Excavations**

The RAW evaluates several remedial alternatives and selects Alternative 5, *Excavation with Off-Site Disposal during Development*. In the initial presentation of the alternatives in the RAW, this alternative is not mentioned to have ICs, i.e. deed restriction and future soil management, but later it becomes clear ICs will be necessary.

The RAW proposes that the soil removal actions will be completed once the designated areas have been excavated to a depth of maximum 2 feet bgs and sidewall verification samples (one per 10 feet of sidewall taken at 1 foot bgs) indicate concentrations are below 25 mg/kg, and at that time a Removal Action Completion Report will be submitted to the DTSC with a request for no further action status for the site. For landscaped areas, the arsenic action level is 25 mg/kg from 0 to 2 feet bgs and 75 mg/kg from 2 to 5 feet bgs (DTSC, 2012). The basis for leaving arsenic-contaminated soil in-place above a concentration of 75 mg/kg is that the upper 2-foot soil layer, assumed to meet the cleanup level (25 mg/kg), will serve as a cover.

LE believes there is no basis for attributing the arsenic concentrations at 2 feet bgs only to the range 2 to 5 feet bgs, and the higher cleanup level of 75 mg/kg, as the lower cleanup level, 25 mg/kg, would have applied if the sample had been collected at any fraction of an inch above 2 feet bgs which is within the margin of accuracy for field measurements of sampling depths. Therefore, to be conservative, the results for 2 feet

bgs should be applied to both the upper 2 feet of soil with a cleanup level of 25 mg/kg and the 2-foot to 5-foot depth range with a cleanup level of 75 mg/kg.

LE believes collecting verification sidewall samples at 10-foot intervals at 1 foot bgs is not a viable approach because sampling results for immediately adjacent soil borings and even duplicate samples show significant variability in arsenic concentrations within soil samples taken inches apart. The great variability of arsenic concentrations within small volumes of soil taken within 6 inches apart is illustrated by duplicate results of some soil samples, e.g. SB11 at 10.5 feet bgs which had a concentration of 21.6 mg/kg with a duplicate result of 12.1 mg/kg (78 percent lower).

LE believes not excavating the entire footprint of the site will lead to a significant risk of leaving highly arsenic-contaminated soil near the ground surface, such as at C19 where the soil meets hazardous characteristics. C19 was taken at 0.1 feet bgs in an area not proposed for excavation.

If Lot 12 were not proposed to be excavated to approximately 25 feet bgs, LE believes the UPPR would have to excavate all soil within that lot to 5 feet bgs to meet the action levels. Therefore, the excavations could not be terminated at 2 feet bgs. Furthermore, as discussed in our recommendations below, dust monitoring and regulatory oversight for Lot 12 will need to continue in full force until the excavation has been completed. While the excavation below 5 feet bgs is driven by the proposed development, the arsenic-impacted soil will result in costs for dust monitoring and regulatory oversight, as well as disposal cost for the soil, which would not be incurred if the soil were clean.

### **Arsenic Analytical Method**

Previous arsenic analyses at and around the site have used EPA Method 6010B which is a method accredited by the California Environmental Laboratory Accreditation Program (ELAP), (SWRCB, 2006). However, the RAW is proposing to use EPA Method 6010D for pre-construction and post-construction confirmation samples. The RAW proposes EPA Method 6010B only for import soil. Since EPA Method 6010D is not an ELAP accredited method, LE does not recommend its use on this project.

### **Excavation Depth**

The RAW is not consistent regarding the proposed excavation depths. The proposed excavation depth is stated in three different ways as “2 feet bgs”, “up to 2 feet bgs” and “less than 2 feet bgs” but no explanation is provided how decisions will be made to determine the excavation depth.

### **Arsenic Contamination of Adjoining City Rights-of-Way**

The RAW states off-site sampling was challenging due to heavily used public roadways on all sides of the site (Section 2.3, pg. 2-4).

Jacobs attached its response to DTSC's comments on the August 2020 RAW to the letter transmitting the RAW. The DTSC commented that the arsenic characterization should extend to background concentrations regardless of property lines or depth. In response to this comment Jacobs stated arsenic characterization is not proposed outside the site boundaries due to physical imitations by the presence of busy streets.

As the figures in the RAW illustrate the site does not adjoin streets to the west of Lot 12, south of Lot 13 and north of Lot 13A. The arsenic contamination in these City rights-of-way have not been adequately characterized. Furthermore, LE understands the City is more than willing to issue a public-right-of-way permit should it become necessary to drill from the public roadway.

### **Pre-Construction Investigation Work Plan**

The RAW attaches a Pre-Construction Investigation Work Plan dated May 2020.

Based on DTSC's comments included with the RAW, in response to the December 2019 RAW, in January 2020 DTSC provided a rationale for a 10-foot spacing grid for pre-construction soil sampling to identify additional potential excavation areas. Jacobs responded the 25-foot spacing was selected to align with 25-foot removal action areas.

LE does not believe the sampling spacing grid should be the same size as the excavation areas, but a fraction of 25 feet and take into account that the arsenic did not result from the placement of fill material but from discharges of arsenic in a liquid solution from two parallel tracks.

Because the entire footprint of Lot 12 will be excavated to 25 feet bgs, LE believes there is no purpose to delineate arsenic excavation areas within Lot 12. If there was an attempt to delineate clean soil within Lot 12 on a 25-foot grid, LE believes the probability is high these designated "clean areas" would fail a robust verification sampling protocol using a tighter grid.

LE does not agree with the RAW's assumption that an arsenic concentration above the cleanup level at 2 foot bgs means that the soil above 2 feet bgs in that sample location is clean (i.e. less than 25 mg/kg). To the contrary we believe the opposite is more likely and unless the soil has been tested and verified to be clean, it must be assumed to be contaminated above the cleanup level.

Given the process which was used for weed abatement using arsenic and the known variability of arsenic concentrations within small areas, LE believes a grid of maximum 10 feet should be used and the samples at 2 feet bgs which exceeded 25 mg/kg should be included in the areas to be excavated. The same sampling grid (10 feet maximum) should be used for the adjoining City rights-of-way; however, these areas will require step-out borings on a tighter spacing (perpendicular to Lots 13 and 13A) probably maximum 2 feet apart.

### **Soil Cover Demarcation**

In areas proposed to be excavated up to 2 feet bgs, the RAW proposes placement of a demarcation layer consisting of polyvinyl chloride tape at the bottom of the excavations in a 10-foot spaced grid pattern.

The stated purpose is to warn potential future construction workers of the arsenic contamination below the demarcation tape. LE does not believe a 10-foot spaced grid is adequate since shallow trenches could be only 2 feet wide. Therefore, if this approach is deemed acceptable, the spacing should be on a 2-foot spaced grid.

### **RECOMMENDATIONS**

#### **Lots 13 and 13A**

Remedial action should be designed to limit or preferably eliminate long term operation and maintenance costs associated with ICs. Therefore, LE recommends the entire footprint of Lots 13 and 13A be excavated based on the historic spraying of sodium arsenite and pervasive spread of arsenic over the entire lots. Since Lots 13 and 13A are proposed for park/recreational use, LE believes an excavation to minimum 2 feet for the entire lots and capping with clean import soil will be sufficient as long as the DTSC would not require dust monitoring and regulatory oversight for future park maintenance and landscaping activities.

At the locations where utilities intersect Lots 13 and 13A, or any arsenic-impacted City-right-of-way, LE recommends trenches be dug to the bottom of the utilities and be backfilled with clean import soil.

Detectable warning tape should be placed over the utilities so they can be located in the future. The trenches will need to be of adequate width so the utilities can be dug out in the future without contacting adjacent arsenic-impacted soil below 2 feet bgs. In addition, LE recommends the placement of demarcation tape, as proposed in the RAW, but at a 2-foot spaced grid.

LE does not recommend a soil cover thickness of less than 2 feet since there are soils between 2 and 5- foot depths that will meet the hazardous waste characteristics criteria based on the maximum arsenic concentration at 5 feet bgs (336 mg/kg) and LE's STLC evaluation.

For the City right-of-way south of Lot 13, additional sampling will be needed to determine the extent of soil removal to meet the 25 mg/kg action level. Additional sampling will also be needed on the City- owned portion of the island directly north of Lot 13A. Any arsenic-impacted soil on City rights-of-way above the 25 mg/kg action level should be remediated in the same way as on Lots 13 and 13A.

The ballast material left from the railroad tracks should be located and completely removed from the site along with any remnant pieces of wood and metals associated with ties. This waste will need to be profiled separately.

Based on the elevated arsenic concentrations, HAZWOPER certification will be required for all site workers involved in the excavation and handling of arsenic-contaminated soil. DTSC oversight and AQMD monitoring will be required until all impacted soils have been removed, the site restored and DTSC has approved regulatory closure.

### **Lot 12**

Since the arsenic-impacted City right-of-way west of Lot 12 will not be developed LE believes an excavation to minimum 2 feet for the entire right-of-way and capping with clean import soil will be sufficient as long as the DTSC will not require dust monitoring and regulatory oversight for future landscaping activities. Any utilities intersecting the City right-of-way should be addressed as described for Lots 13 and 13A, and demarcation tape added in a 2-foot spaced grid.

The ballast material left from the railroad tracks should be located and completely removed from the site along with any remnant pieces of wood and metals associated with ties. This waste will need to be profiled separately.

The probability that soil will be hazardous is greatest for the shallow soil in the upper 5-feet and decreases with depth. Therefore, it is important that the shallow soil is stockpiled separately from deeper soil and not mixed.

Based on the arsenic data from ground surface to 10 feet bgs, and the arsenic concentration in SB2 at 30 feet bgs (152 mg/kg), LE believes arsenic concentrations meeting the STLC criterion for hazardous will likely be encountered within Lot 12 in spots extending to depths near the bottom of the proposed excavation for the subterranean parking. Therefore, LE recommends DTSC oversight and AQMD monitoring until all arsenic-impacted soils have been removed. Based on the elevated arsenic concentrations at depth, HAZWOPER certification will be required for all site workers involved in the excavation and handling of arsenic-contaminated soil.

Even if waste profile samples would not designate the excavated soil as hazardous, the average arsenic concentrations are above normal background for California soils and DTSC's general cleanup goal of 12 mg/kg for California sites (DTSC, 2009); therefore, the excavated soil cannot be reused and must be disposed at a permitted facility that accepts elevated non-hazardous arsenic-contaminated soils.

The monitoring with oversight from the DTSC and AQMD will need to begin with the drilling and excavation for shoring installation or as soon as equipment with the potential to generate dust is brought on-site.

### **Groundwater**

In order to better evaluate the groundwater data for wells MW-1 and MW-2, LE recommends that the UPPR provide well sampling field records, well elevations and coordinates, groundwater elevations, well installation details, and permits for installation and abandonment. Since the wells were installed through highly arsenic-contaminated

soil, the proper abandonment of the wells, in accordance with the requirements of the Los Angeles County - Department of Public Health, is of particular importance.

Based on the elevated arsenic concentrations in groundwater beneath the site, ranging to 270 ug/L, the measured groundwater flow direction toward municipal well 4, and the persistent arsenic concentrations in well 4 above the MCL, LE believes a Site Conceptual Model should be prepared, considering the water production wells, groundwater flow directions, and all arsenic data.

To further assess the arsenic impact on groundwater, LE recommends a comprehensive hydrogeological investigation, and preliminary recommends the installation of two groundwater monitoring wells on Lot 12 and 13 in the vicinity of the arsenic-impacted well 4. LE also recommends two wells on Lots 12 and 13 at the two hot spots, No. 2 and No. 3, and two wells both north and south of the site for a total of eight wells. The installation details and locations of the wells should be determined with input from the City, the City's environmental consultant, and in consultation with the California Regional Water Quality Control Board-Los Angeles Region, if requested by the City.

LE understands that well 4 is currently not in operation. LE recommends the new monitoring wells be installed and monitored before groundwater extraction resumes. When the wells are drilled, the borings must be logged and soil samples for arsenic analysis should be collected at 2 feet and 5 feet bgs and on 5-foot intervals below to the bottom of the borings. LE does not believe the groundwater samples should be filtered since MCLs at the source are based on unfiltered water.

## REFERENCES

1. California Department of Toxic Substance Control (DTSC), Letter re: *Arsenic Evaluation for the Beverly Hills Lots 12 & 13*, February 5, 2008. [https://www.envirostor.dtsc.ca.gov/public/deliverable\\_documents/7663861930/2008\\_02\\_05%20Arsenic%20In%20Groundwater%20Letter.pdf](https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/7663861930/2008_02_05%20Arsenic%20In%20Groundwater%20Letter.pdf).
2. California Department of Toxic Substance Control (DTSC), *Arsenic Strategies: Determination of Arsenic Remediation, Development of Arsenic Cleanup Goals*, January 16, 2009. <https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/01/Arsenic-Cleanup-Goals-Jan09-A.pdf>.
3. California Department of Toxic Substance Control (DTSC), Letter re: *Approval of Groundwater Monitoring Well Sampling Summary and Notice of Well Abandonment for the Beverly Hills Lots 12 and 13*, July 9, 2010. [https://www.envirostor.dtsc.ca.gov/public/deliverable\\_documents/4383717179/2010\\_07\\_09%20Groundwater%20Approval%20Letter.pdf](https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/4383717179/2010_07_09%20Groundwater%20Approval%20Letter.pdf).
4. California Department of Toxic Substance Control (DTSC), *Arsenic Cleanup Levels Regarding Lot 12 and 13 Site, Beverly Hills, California*, May 21, 2012.

5. California Department of Toxic Substance Control (DTSC), *Voluntary Cleanup Agreement, Docket No. HSA VCA-17/18-152. In the Matter of: Beverly Hills Lots 12 and 13, 9100-9350 North Santa Monica Boulevard and 9101-9349 Civic Center Drive, Beverly Hills, Proponent: City of Beverly Hills*, August 1, 2018.  
[https://www.envirostor.dtsc.ca.gov/public/deliverable\\_documents/8233187615/Beverly%20Hills%20Lot%2012%2613%20%5F%20City%20of%20Beverly%20Hills%5FVCA%5F80118%2Epdf](https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/8233187615/Beverly%20Hills%20Lot%2012%2613%20%5F%20City%20of%20Beverly%20Hills%5FVCA%5F80118%2Epdf).
6. California State Water Resources Control Board (SWRCB), *Inorganic Chemistry & Toxic Chemical Elements of Hazardous Waste/Extraction Test/Physical Properties of Hazardous Waste*, revised May 2006.  
[https://www.waterboards.ca.gov/drinking\\_water/certlic/labs/fot\\_forms.html](https://www.waterboards.ca.gov/drinking_water/certlic/labs/fot_forms.html).
7. Carollo Engineers (Carollo), *City of Beverly Hills-Water Treatment Plant Pretreatment Testing Report- Final Piloting Report-Draft*, May 2018.  
<http://www.beverlyhills.org/cbhfiles/storage/files/10936624531602133247/05-31-18revised.PDF>.
8. CH2M Hill (CH2M), *Final Report Remedial Investigation, Beverly Hills Land Corporation Site*, August 11, 2006.  
[https://www.envirostor.dtsc.ca.gov/public/final\\_documents2?global\\_id=19400017&doc\\_id=6007622](https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=19400017&doc_id=6007622).
9. CH2M Hill (CH2M), *Results of October 2008 Groundwater Investigation, 9315 Civic Center Drive, Beverly Hills Land Company*, November 28, 2008a.  
[https://www.envirostor.dtsc.ca.gov/public/deliverable\\_documents/2891499161/2008\\_11\\_28%20Groundwater%20Investgation%20Report.pdf](https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/2891499161/2008_11_28%20Groundwater%20Investgation%20Report.pdf).
10. CH2M Hill (CH2M), *Groundwater Monitoring Well Work Plan (Draft)*, December 23, 2008b.
11. CH2M Hill (CH2M), *Figure 2-Proposed Monitoring Well Locations*, August 28, 2009.
12. CH2M HILL, Inc. (CH2M). *Well Abandonment, Monitoring Wells MW-1 and MW-2, BHLC at 9315 Civic Center Drive, Beverly Hills, CA*, June 7, 2010.  
[https://www.envirostor.dtsc.ca.gov/public/deliverable\\_documents/7350849747/2010\\_06\\_07%20RP%20Well%20Abandonment%20Letter%20and%20Lab%20Data.pdf](https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/7350849747/2010_06_07%20RP%20Well%20Abandonment%20Letter%20and%20Lab%20Data.pdf)
13. CH2M Hill (CH2M), *Removal Action Work Plan-Draft Final, Beverly Hills Lots 12 and 13*, June 15, 2015.  
[https://www.envirostor.dtsc.ca.gov/public/community\\_involvement/2640363395/2015\\_06\\_15%20Draft%20Final%20RAW%20-%20Ready%20for%20Public%20Comment.pdf](https://www.envirostor.dtsc.ca.gov/public/community_involvement/2640363395/2015_06_15%20Draft%20Final%20RAW%20-%20Ready%20for%20Public%20Comment.pdf).

14. City of Beverly Hills, Department of Public Works and Transportation (City), *2008 Water Quality Report of Beverly Hills*, 2009.  
<https://www.beverlyhills.org/cbhfiles/storage/files/filebank/5617--2008%20Consumer%20Confidence%20Report.pdf>.
15. Gensler, *Beverly Hills Creative Office, Planning Application Resubmittal Set*, April 17, 2020.
16. Geotechnical Consultants, Inc., (GTC), *Report of Operations, Rehabilitation and Redevelopment, Well No.4, City of Beverly Hills*, January 2019.
17. Jacobs Engineering Group Inc. (Jacobs), *Removal Action Work Plan, Union Pacific Railroad Beverly Hills Site, 9315 Civic Center Drive, Beverly Hills, California-Draft*, December 2019.
18. Jacobs Engineering Group Inc. (Jacobs), *Removal Action Work Plan, Union Pacific Railroad Beverly Hills Site, 9315 Civic Center Drive, Beverly Hills, California-Draft*, August 3, 2020a.
19. Jacobs Engineering Group Inc. (Jacobs), *Removal Action Work Plan, Union Pacific Railroad Beverly Hills Site, 9315 Civic Center Drive, Beverly Hills, California-Draft*, September 18, 2020b.
20. Lindmark Engineering (Lindmark), *Site Characterization Report, City of Beverly Hills Maintenance Facility, 331 North Foothill Road*, July 16, 2002a.
21. Lindmark Engineering (Lindmark), *Third Quarter 2002 Groundwater Monitoring Report, City of Beverly Hills Fire Station No. 3, 180 South Doheny Drive, Beverly Hills, California, RWQCB File No. 12017*, October 15, 2002b.
22. Lindmark Engineering, Inc., (LE), *Arsenic Assessment Sampling Report for Fence Realignment, Adjacent to North Santa Monica Boulevard, Lots 12 and 13, Beverly Hills, California*, August 23, 2016.  
[https://www.envirostor.dtsc.ca.gov/public/community\\_involvement/1775680363/Additional%20Arsenic%20Sampling%20Report%20-%20Final.pdf](https://www.envirostor.dtsc.ca.gov/public/community_involvement/1775680363/Additional%20Arsenic%20Sampling%20Report%20-%20Final.pdf).
23. Lindmark Engineering, Inc., (LE), *Arsenic Evaluation Report-Final, North Santa Monica Boulevard Reconstruction Project, North Santa Monica Boulevard between Wilshire Boulevard and Doheny Drive*, January 30, 2017.  
[https://www.envirostor.dtsc.ca.gov/public/community\\_involvement/1775680363/2016-169%20NSMB%20Arsenic%20Assmt%20-Final.pdf](https://www.envirostor.dtsc.ca.gov/public/community_involvement/1775680363/2016-169%20NSMB%20Arsenic%20Assmt%20-Final.pdf).
24. Lindmark Engineering, Inc. (LE), *Draft North Santa Monica Boulevard Reconstruction Project Phase II – Project Completion Report, Lots 12 and 13*, June 28, 2018.

25. Lindmark Engineering, Inc, (LE), *Final Draft Soil Management Plan, City of Beverly Hills Right-of-Way New Tree Planting*, January 7, 2019.
26. Lindmark Engineering, Inc, (LE), *Review of Jacobs's Draft Removal Action Work Plan, dated December 18, 2019 for Lots 12, 13 and 13A*, August 4, 2020.
27. National Center for Biotechnology Information, (NCBI) PubChem Database.  
<https://pubchem.ncbi.nlm.nih.gov/compound/Sodium-arsenite>.
28. Rincon Consultants, *Arsenic Soil Sampling and Health Risk Assessment, Civic Center Drive*, January 5, 2016.  
[https://www.envirostor.dtsc.ca.gov/public/community\\_involvement/7022083878/Arsenic%20Sampling%20rd%20draft.pdf](https://www.envirostor.dtsc.ca.gov/public/community_involvement/7022083878/Arsenic%20Sampling%20rd%20draft.pdf)
29. South Coast Air Quality Management District (AQMD), *Rule 403, Fugitive Dust*, Adopted May 7, 1976 with amendments through June 3, 2005.  
<http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>.
30. South Coast Air Quality Control District (AQMD), *Rule 1466, Control of Particulate Emissions from* dated December 1, 2017. <https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf?sfvrsn=19>.
31. United States Geological Survey (USGS), *Beverly Hills Quadrangle, Los Angeles County, California*, 1995.
32. Water and Power Associates.  
[https://waterandpower.org/museum/Early\\_Views\\_of\\_Beverly\\_Hills.html](https://waterandpower.org/museum/Early_Views_of_Beverly_Hills.html).
33. Wikipedia. [https://en.wikipedia.org/wiki/Pacific\\_Electric](https://en.wikipedia.org/wiki/Pacific_Electric).  
Wikipedia. [https://en.wikipedia.org/wiki/Beverly\\_Hills\\_\(Pacific\\_Electric\)](https://en.wikipedia.org/wiki/Beverly_Hills_(Pacific_Electric)).



David Yelton, Deputy Building Official  
Development Services Division  
Community Development Department

October 21, 2020

Ms. Sara Vela, Project Manager  
Department of Toxic Substances Control  
9211 Oakdale Avenue  
Chatsworth, CA 91311

Subject: City of Beverly Hills Peer Review by Lindmark Engineering's peer review of Jacobs Engineering Group, Inc. Draft Removal Action Work Plan (RAW) for the property known as Lots 12, 13, and 13A on behalf of the responsible party, the Union Pacific Railroad, and comments on the DTSC's CEQA Initial Study for the property known as Lots 12, 13, and 13A in the City of Beverly Hills, California, 90210

Dear Sara,

The City is enclosing Lindmark Engineering's review of Jacobs's Draft Removal Action Work Plan (RAW), dated September 18, 2020 for the property known as Lots 12, 13, and 13A. Jacobs prepared the RAW on behalf of the responsible party, the Union Pacific Railroad (UPRR). Also provided are comments to the DTSC's CEQA Initial Study dated September 15, 2020 for Lots 12, 13, and 13A.

As Lindmark's review outlines, the RAW is inadequate in several aspects; most notably, it assumes there were no railroad operations and arsenic weed abatement at the site, no significant vertical migration of arsenic in soil, and no groundwater contamination from arsenic releases at the site. Due to these improper assumptions, only a portion of the arsenic-impacted soil is proposed to be removed and the groundwater contamination, including off-site migration, is not addressed. Furthermore, arsenic contamination on adjoining City rights-of way is not addressed.

The groundwater contamination of arsenic is of great concern given the City water wells in the site vicinity and presence of elevated arsenic levels in the water supply within 100 feet of the site.

The City wants the site and adjoining City rights-of-way to be remediated to safe levels and to ensure that the remediation is implemented in a manner to prevent off-site migration of dust in compliance with all applicable DTSC and AQMD requirements. The City requests that all tasks, assessments and remediation recommended in the enclosure hereto be completed and paid for by the UPRR prior to issuance of a No Further Action letter for the site. Access to City rights-of-way will require an access agreement.

The City objects to contamination being left in place at the site at levels that will require future Institutional Controls affecting City property. Institutional controls, after the completion of remediation on City rights-of-way, are not acceptable to the City, including for Lots 13 and 13A,

which will be deeded to the City. The City requests that the site be remediated in a manner that will not result in future regulatory oversight and dust monitoring of the City rights-of-way and Lots 13 and 13A after they have been remediated.

On October 21, 2020, the City submitted reference documents to the DTSC via the City's large file dropbox ("BevyBox") file transfer system. One of these documents contained development plans for Lot 12 dated April 17, 2020. According to the plans, the entire footprint of Lot 12 will be excavated to a depth of 25 feet and developed with 2-story subterranean parking and eleven 3- and 4-story above grade office buildings.

According to your website ("Envirostor"), DTSC will revise the draft RAW and CEQA Initial Study after the City has approved a redevelopment plan, then recirculate for public review and comment along with another public meeting . However, the revised RAW and the CEQA Initial Study do not address the proposed development and your Community Update Notice did not mention the development plans.

Since the excavation for the development of Lot 12 could generate approximately 109,000 cubic yards of arsenic-contaminated soil we think it is imperative that the development plans are incorporated into the RAW and CEQA Initial Study for which the community is supposed to provide comments.

Sincerely,



David Yelton

Attachments: Lindmark Engineering report dated October 21, 2020, Project No. 2020-260, titled Review of Jacob's Draft Removal Action Work Plan, dated September 18, 2020 for Lots 12, 13 and 13A.

Lindmark Engineering comments dated October 21, 2020, Project No. 2020-260, titled Review of DTSC's CEQA Initial Study, dated September 15, 2020 for Lots 12, 13 and 13A.

cc: Haissam Salloum, Supervisor (DTSC)  
Chinh Sheow, Public Participation (DTSC)  
Gamaliel Ortiz, Public Information Officer (DTSC)  
Ulf Lindmark, PE, BCEE, Senior Principal, Lindmark Engineering  
George Chavez, City Manager  
Nancy Hunt-Coffey, Assistant City Manager  
Susan Healy Keene, Director of Community Development  
Ryan Gohlich, City Planner  
Masa Alkire, Principal Planner  
Raj Patel, City Building Official  
Shana Epstein, Director of Public Works  
Daren Grilley, City Engineer  
Vincent Damasse, Water Resources Manager  
Laurence Wiener, City Attorney  
Lisa Bond, Assistant City Attorney

Response to Comment #10:

Lot 13A -The RAW will be revised to clarify that the “Triangle Section” excludes the City rights-of-way, since the site does not include City property.

Sources of Arsenic Contamination - The comment references a magazine article describing the use of sodium arsenite as a weed killer. The article does not describe its use at the project site and also describes other weed removal methods that do not use sodium arsenite. Thus, while sodium arsenite has been historically used as a weed killing agent, there is no evidence it was used at the Site for this purpose. The distribution of arsenic does not provide definitive evidence that sodium arsenite was applied at the site.

Limitations of Investigatory Data used by the RAW - The RAW includes a plan to collect additional samples to identify areas that require excavation.

Arsenic Leachability - While some characterization soil samples indicate soils exceeding the hazardous waste threshold, waste characterization and profiling will be based on waste profile samples collected as part of the proposed removal action.

Distribution of Arsenic in Soil - The RAW presents the plan to collect additional samples to better assess where removal of impacted soil is warranted as part of the environmental cleanup activities. Construction of the proposed subterranean parking structure by the property owner as part of potential development activities has not been approved and management of soil resulting from such an excavation is not covered in the RAW.

Excavation to depths below 2 feet bgs is not planned in the RAW. As described later in this response, DTSC has concluded that groundwater at the site is not impacted by arsenic.

Groundwater Conditions – Hydro-punch samples are used for screening and investigation purposes rather than to demonstrate compliance with aquifer water quality standards because they may be less representative of groundwater conditions than samples collected from monitoring wells using more rigorous sampling methods (purging using low-flow) that better represent aquifer conditions. Monitoring wells MW-1 and MW-2 were installed in the areas where the highest arsenic concentrations in groundwater were observed and the wells were sampled to confirm the results of the hydropunch sampling. Arsenic concentrations in samples collected from these wells were below the MCL. Based on these results, DTSC has concluded that groundwater at the site is not impacted by arsenic.

Lindmark Engineering (1998, 2003) concluded that groundwater in the alluvium beneath the site is discontinuous and perched (not connected with the regional aquifer system). The hydro-punch samples referenced in the comment were collected from this discontinuous groundwater zone at depths between 35 and 54 feet bgs. Subsequent samples from monitoring wells MW-1 and MW-2 demonstrated that this shallow

groundwater zone was not impacted by arsenic. The usable aquifers in the area range from 180 feet bgs to 720 feet bgs. Given that the shallow groundwater zone is not impacted by arsenic at the site, there is no reason to suspect that the deeper aquifers are impacted. A risk assessment (CH2M, 2007) concluded that the arsenic was unlikely to migrate downward into these aquifers and that the exposure pathway for arsenic in groundwater was incomplete.

Lindmark Engineering (Lindmark). 1998 *Phase I and II Environmental Investigation, Railroad Right-of-Way between North Doheny and Alpine Drives, Beverly Hills, California 90210*. November 12.

Lindmark Engineering (Lindmark). 2003. *Stage Two – Phase II Environmental Site Investigation, Lots 12 and 13 of the Beverly Hills Land Corporation Right-of-Way, Beverly Hills, California*. June 30.

CH2M HILL Engineers Inc. (CH2M). 2007. *Human Health Risk Assessment, Beverly Hills Land Corporation Site (Lots 12 and 13)*. May.

Water Supply Wells - As noted in the comment, the City's wells draw water from the deepest aquifer units, which range from about 540 to 720 feet bgs. These aquifer units are several hundred feet deeper than the shallow groundwater zone, are hydraulically confined and there does not appear to be connection between them and the discontinuous groundwater zone beneath the site. The cement seal in well 4 provides additional protection against vertical migration of shallow groundwater into the well. Also, as described previously, the shallow groundwater zone was demonstrated to be unimpacted by arsenic. The presence of elevated manganese and total dissolved solids in well 4 likely is representative of the deeper aquifer and does not indicate impacts from the site.

Proposed Excavation - While previous data for samples collected at 2 feet bgs are not being used to determine removal areas from ground surface to 2 feet bgs, additional samples will be collected as part of pre-design investigation activities to evaluate the need to remove soil in areas where arsenic levels exceed the cleanup goal at 2 feet bgs. These data, in combination with previous project-related data, will be used to define soil removal areas in accordance with the RAW.

Arsenic Analytical Method - The RAW will be revised to propose EPA Method 6010B for all sample analysis for arsenic.

Excavation Depth - The RAW will be revised to use consistent nomenclature when describing the proposed depth of excavation.

Arsenic Contamination of Adjoining City Rights-of-Way - The RAW only pertains to the area within the property boundary.

Pre-Construction Investigation Work Plan - The RAW presents the plan to collect additional samples to better assess where removal of impacted soil is warranted as part of the environmental cleanup, which includes removal of impacted soil up to 2 feet bgs. Any soil removal conducted beneath 2 feet bgs is not part of the proposed removal action, but rather potential development activities not covered by the RAW.

While data for samples collected at 2 feet bgs is not being used to determine removal areas from ground surface to 2 feet bgs, additional samples will be collected as part of pre-design investigation activities to evaluate the need to remove soil in areas where arsenic levels exceed the cleanup goal at 2 feet bgs within the property boundaries.

Soil Cover Demarcation - In addition to the use of demarcation tape, an additional institutional control will include posting signage at the site notifying potential excavators of the presence of arsenic-impacted soil and providing guidance for soil disturbance and management requirements.

RECOMMENDATIONS, Lots 13 and 13A - The existing data does not support removal of soil within the entire lot and doing so would be cost prohibitive. The RAW presents the plan to collect additional samples to further assess where removal of impacted soil is warranted in accordance with the RAW to address areas where data gaps exist.

Potential future excavations below 2 feet bgs associated with development are not part of the RAW. Environmental cleanup excavation will be limited to the properties described in the RAW and will not be conducted in the City right-of-way. Additional excavation associated with potential development (not covered under the RAW) would be required to be conducted in accordance with plans approved by DTSC.

Ballast will be removed during the proposed action if it is present at a depth of less than 2 feet bgs in an area where the arsenic concentration exceeds 25 mg/kg.

RECOMMENDATIONS, Lots 12 - The existing data does not support removal of soil within the entire lot and doing so would be cost prohibitive. The RAW presents the plan to collect additional samples to better assess where removal of impacted soil as part of environmental cleanup is warranted in accordance with the RAW. Excavation is not proposed within the City right-of-way. Excavation associated with any potential development by the land owner is not covered under the RAW.

RECOMMENDATIONS, Groundwater - Well construction, sampling, and abandonment documentation will be made available to the public. Additional groundwater assessment, including sampling and well installation, is not warranted. Based on historical investigation, it is not believed that arsenic contamination in soils is a threat to groundwater quality, based on the longtime existence of arsenic in soils and the groundwater sampling results. Previous groundwater investigations have demonstrated that the shallow groundwater zone at the site is not impacted by arsenic and is not connected to the regional aquifers used as a water supply.

**Comment #11 - Department of Transportation, District 7- Office of Regional Planning, Los Angeles, CA.**

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The Removal Action Work Plan (RAW) evaluates removal action alternatives and identifies a preferred removal action based on comparative analysis of alternatives. The preferred removal action (Alternative #5) for the Site includes excavation and disposal of 4,400 cubic yards of arsenic-impacted soil up to 2 feet below ground surface (bgs) and disposal of contaminated soil at an appropriately permitted landfill and establishment of a 2-foot soil cover. Up to approximately 4,400 cubic yards of clean imported soil may be used to backfill the excavations. However, if approved development of the Site is conducted concurrently with remedial excavation activities, some areas may not be backfilled to accommodate development plans. The proposed project is anticipated to commence following approval of the RAW and would take approximately 6 weeks to complete. Upon completion of the RAW, a Land Use Covenant (LUC) in the form of deed restrictions/Institutional Controls (IC's) will be implemented.

The nearest State facilities to the proposed project are Interstate 405 and State Route 2. After reviewing the ND, Caltrans has the following comments:

All anticipated truck routes identified in Section 7 of the Removal Action Work Plan will involve the use of State Highways. Before any contaminated material is removed the Caltrans Office of Permits must be contacted to determine the appropriate combination of permits that will be required. Below is guidance on three plan packages that may be required prior to issuance of permits.

**Excavation Transportation and Disposal Plan Guidance Excavation Plan (EP)**

The EP must discuss all activities proposed under the requested permit that involve the excavation of contaminated soil. The EP must include:

1. Schedule for excavation of contaminated areas.
2. Soil volume estimates for each contaminated area.
3. Identification of and figure showing temporary staging areas for soil stockpiles (off Caltrans right-of-way).
4. Methods to secure and prevent access to the staging areas.
5. Soil excavation and stockpiling procedures.
6. Types of containers to be used.
7. Decontamination process.

If soil stockpiling is necessary, all stockpiles shall be located off Caltrans R/W. Stockpiles must not be located upslope from or allow entrance into storm drains, inlets, or waters of the State or placed in locations where they may come in contact with surface water run on or run off. Soil stockpiles must be placed on and covered with plastic sheeting and wetted with water to suppress dust and reduce the possibility of contamination becoming airborne. Excavation and handling of contaminated material must not result in visible dust migration. The contractor must have a water truck or tank

on the job site at all times while clearing and grubbing and performing earthwork operations in work areas. Apply water to prevent visible dust.

### **Sampling and Analysis Plan (SAP)**

The SAP must include discussion of all characterization sampling, excavation, and construction activities that involve handling potentially contaminated soil during work under the permit. The SAP must provide sufficient detail to completely characterize the material proposed for excavation and disposal. The SAP must list criteria for waste profile characterization of the contaminated material to determine whether the waste is unregulated, designated waste, non-RCRA (California) hazardous waste, or RCRA hazardous waste. The SAP must also include disposal options (e.g., Class 3, Class 2, or Class 1). The SAP must comply with Cal/OSHA regulations and meet the specifications contained in USEPA, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Volume II: Field Manual, Chapter Nine, Section 9.1.

The SAP must include the following elements:

1. Description of Proposed Activities.
2. Data Quality Objective Process;
  - 2.1 Project task and problem definition,
  - 2.2 Data quality objectives,
  - 2.3 Data quality indicators,
  - 2.4 Data review and validation,
  - 2.5 Data Management.
  - 2.6 Field Methodologies and Procedures for sampling
3. Sampling Rationale including sample location and number of samples.
4. Field Methodologies and Procedures for sampling
5. Sample Handling Procedures;
  - 5.1 Collection and transfer of samples to new or laboratory-certified clean container under proper chain of custody to an Environmental Laboratory Accreditation Program (ELAP) certified laboratory.
  - 5.2 Contaminated material and water samples analyzed within the holding times specified in SW-846 Test Methods for Evaluating Solid Waste.
6. Decontamination.
7. Disposal of staging area contaminated material, water, and IDW.
8. Quality Assurance/Quality Control (QA/QC) Laboratory and Field procedures.
9. Statistical Analysis of the sample data in accordance with EPA SW-846 Test Methods for Evaluating Solid Waste.
10. Schedule for field work.

### **Transportation and Disposal Plan (TDP)**

The TDP must be prepared based on the analytical findings outlined in the SAP, identifying non-hazardous and/or hazardous disposal requirements for the contaminated material. The TDP must conform to the regulations of the DTSC and the Cal-OSHA.

The plan must describe the procedures that will be followed to minimize potential health, safety, and environmental risks resulting from movement of contaminated material and equipment during on-site and off-site transport. The TDP must contain, but not be limited to the following elements:

1. Transportation, safety, and waste disposal schedule.
2. Locations of contaminated material.
3. Analytical results of contaminated material.
4. Characteristics of contaminated material to be transported with description of appearance, source, approximate quantity, nature of the contaminants and their associated hazards.
5. Dust control measures.
6. Air monitoring.
7. Identity of transporters and proof of valid hauler registration.
8. Location, type, number, and capacity of equipment, containers, and transport vehicles.
9. Analytical laboratory certified by ELAP.
10. Truck loading and staging areas.
11. Transportation route from each contaminated area of excavation to staging areas.
12. Transportation equipment and routes of transport.
13. Traffic Control and loading procedures.
14. Decontamination of trucks prior to leaving the loading area.
15. Inspection of vehicles prior to leaving site.
16. Method for preventing spills and tracking contaminated soil and spilling contaminated water onto public roads.
17. Spill contingency plan for accidental off-site releases.
18. Destination and disposition of contaminated soil and water.
18. Record Keeping.

If you have any questions, please contact project coordinator Anthony Higgins, at [anthony.higgins@dot.ca.gov](mailto:anthony.higgins@dot.ca.gov) and refer to GTS# 07-LA-2020-03376.

**DEPARTMENT OF TRANSPORTATION**  
DISTRICT 7- OFFICE OF REGIONAL PLANNING  
100 S. MAIN STREET, SUITE 100  
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www.dot.ca.gov



*Making Conservation  
a California Way of Life.*

October 21, 2020

Department of Toxic Substances Control  
9211 Oakdale Avenue  
Chatsworth, CA 91311  
Attn: Sara Vela, Project Manager

RE: Removal Action Work Plan for Union Pacific  
Railroad Beverly Hills – Negative  
Declaration (ND)  
SCH# 2020090440  
GTS# 07-LA-2020-03376  
Vic. LA-405 PM 30.809  
Vic. LA-2 PM 10.621

Dear Sara Vela,

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The nearest State facilities to the proposed project are Interstate 405 and State Route 2. After reviewing the ND, Caltrans has the following comments:

All anticipated truck routes identified in Section 7 of the Removal Action Work Plan will involve the use of State Highways. Before any contaminated material is removed the Caltrans Office of Permits must be contacted to determine the appropriate combination of permits that will be

required. Below is guidance on three plan packages that may be required prior to issuance of permits.

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If soil stockpiling is necessary, all stockpiles shall be located off Caltrans R/W. Stockpiles must not be located upslope from or allow entrance into storm drains, inlets, or waters of the State or placed in locations where they may come in contact with surface water run on or run off. Soil stockpiles must be placed on and covered with plastic sheeting and wetted with water to suppress dust and reduce the possibility of contamination becoming airborne. Excavation and handling of contaminated material must not result in visible dust migration. The contractor must have a water truck or tank on the job site at all times while clearing and grubbing and performing earthwork operations in work areas. Apply water to prevent visible dust.

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- 2.6 Field Methodologies and Procedures for sampling
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4. Field Methodologies and Procedures for sampling
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6. Air monitoring.
7. Identity of transporters and proof of valid hauler registration.
8. Location, type, number, and capacity of equipment, containers, and transport vehicles.
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18. Destination and disposition of contaminated soil and water.
19. Record Keeping.

If you have any questions, please contact project coordinator Anthony Higgins, at [anthony.higgins@dot.ca.gov](mailto:anthony.higgins@dot.ca.gov) and refer to GTS# 07-LA-2020-03376.

Sincerely,



MIYA EDMONSON

IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

**Response to Comment #11:**

The advance information regarding permit application materials is appreciated and will be used to support the permit application process.

**Comment #12 – Lijin Sun, J.D., South Coast Air Quality Management District, Diamond Bar, CA**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The Department of Toxic Substances Control (DTSC) is the CEQA Lead Agency for the Proposed Project. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final ND.

**South Coast AQMD Staff's Summary of Project Description**

The Lead Agency proposed to develop cleanup actions to remove soil contaminated with arsenic on five acres (Proposed Project). The Proposed Project is located on the southeast corner of Santa Monica Boulevard and North Doheny Drive in the City of Beverly Hills. Construction of the Proposed Project is expected to take six weeks. Soil excavation consists of removing 6,600 tons (4,400 cubic yards) of arsenic-contaminated soil. At completion of excavation activities, the excavations will be backfilled with up to 4,4000 cubic yards or approximately 264 truckloads of imported clean soil (approximately nine truckloads per day), and the backfilled soil will be compacted.

**South Coast AQMD Staff's Comments:**

**CEQA Air Quality Analysis**

According to the ND, the Lead Agency did not quantify the Proposed Project's construction emissions from soil excavation activities, which will require the use of trucks to transport arsenic-contaminated soil and clean soil. The ND also did not identify the permitted hazardous disposal facility that will accept the disposal of arsenic-contaminated soil from the Proposed Project to determine the appropriate truck trip length and calculate construction emissions from haul truck trips. Arsenic-contaminated soil may need to be disposed at a permitted hazardous disposal facility outside Los Angeles County or State of California.

One of the basic purposes of CEQA is to inform government decision makers and the public about the potential, significant environmental effects of proposed activities (CEQA Guidelines Section 15002(a)(1)). A negative declaration is appropriate when the Lead Agency finds that the project will not have a significant effect on the environment (CEQA Guidelines Sections 15070 to 15075). Reasons to support this finding shall be documented in the initial study. Without quantifying emissions from excavation activities, the ND has not made that documentation which serves as substantial evidence to support a fair argument that the Proposed Project would not have any adverse effects on air quality. Therefore, South Coast AQMD staff recommends that the Lead Agency identify the permitted hazardous disposal facility that the Proposed Project will use to dispose arsenic-contaminated soil and the locations that the Proposed Project will use to obtain clean soil, disclose them in the Final ND, calculate the Proposed Project's construction emissions from truck trips for hauling

contaminated and clean soil based on the appropriate one-way trip length, and compare the construction emissions to South Coast AQMD's regional air quality CEQA significance thresholds to determine the level of significance for the Proposed Project's air quality impacts in the Final ND.

#### Mitigation Measures

In the event that the Proposed Project results in significant adverse air quality impacts during construction, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. South Coast AQMD staff recommends that the Lead Agency require the use of zero-emissions (ZE) or near-zero emission (NZE) on-road haul trucks such as heavy-duty trucks with natural gas engines that meet the California Air Resources Board (CARB)'s adopted optional NOx emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. At a minimum, require the use of 2010 model year4 that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. Include environmental analyses to evaluate and identify sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the Final ND, where appropriate. Include the requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.

#### *South Coast AQMD Rules*

Arsenic is among the applicable toxic air contaminants listed in South Coast AQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants<sup>5</sup>. It is recommended that the Final ND and the Final Removal Action Workplan (RAW) include clarification on whether the DTSC, or other agencies listed in Rule 1466(b), have designated, or plan to designate, the site for the contaminant listed as a concern subject to Rule 1466. Since more than 50 cubic yards of contaminated soil will be excavated, the site would be subject to South Coast AQMD Rule 1466 requirements if designated pursuant to the provisions of 1466(b)(1). It is recommended that applicable Rule 1466 requirements be incorporated into the Final ND and the Final RAW if the site is so designated. Additionally, the Final ND and the Final RAW should ensure excavation and soil movement operations will comply with South Coast AQMD Regulation IV-Prohibitions<sup>6</sup>, such as Rule 401 – Visible Emissions<sup>7</sup>, Rule 402 – Nuisance<sup>8</sup>, and Rule 403 – Fugitive Dust<sup>9</sup>.

#### Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the ND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide

sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project. Further, when the Lead Agency makes the finding that the recommended mitigation measure is not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting it in the Final MND (CEQA Guidelines Sections 15070 and 15074.1).

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. If you have any questions or wish to discuss the comments related to CEQA air quality analysis and mitigation measures, please contact me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov). If you have any questions or wish to discuss the comments related to South Coast AQMD rules, please contact Mr. John Anderson, Air Quality Analysis and Compliance Supervisor, at [janderson@aqmd.gov](mailto:janderson@aqmd.gov).



# South Coast Air Quality Management District

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SENT VIA E-MAIL:

October 14, 2020

[Sara.Vela@dtsc.ca.gov](mailto:Sara.Vela@dtsc.ca.gov)

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Chatsworth, CA 91311

## **Negative Declaration (ND) and Draft Removal Action Workplan (RAW) for the Proposed Union Pacific Railroad Beverly Hills (Proposed Project) (SCH No.: 2020090440)**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The Department of Toxic Substances Control (DTSC) is the CEQA Lead Agency for the Proposed Project. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final ND.

### South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposed to develop cleanup actions to remove soil contaminated with arsenic on five acres (Proposed Project). The Proposed Project is located on the southeast corner of Santa Monica Boulevard and North Doheny Drive in the City of Beverly Hills. Construction of the Proposed Project is expected to take six weeks<sup>1</sup>. Soil excavation consists of removing 6,600 tons (4,400 cubic yards) of arsenic-contaminated soil<sup>2</sup>. At completion of excavation activities, the excavations will be backfilled with up to 4,4000 cubic yards or approximately 264 truckloads of imported clean soil (approximately nine truckloads per day), and the backfilled soil will be compacted<sup>3</sup>.

### South Coast AQMD Staff's Comments

#### *CEQA Air Quality Analysis*

According to the ND, the Lead Agency did not quantify the Proposed Project's construction emissions from soil excavation activities, which will require the use of trucks to transport arsenic-contaminated soil and clean soil. The ND also did not identify the permitted hazardous disposal facility that will accept the disposal of arsenic-contaminated soil from the Proposed Project to determine the appropriate truck trip length and calculate construction emissions from haul truck trips. Arsenic-contaminated soil may need to be disposed at a permitted hazardous disposal facility outside Los Angeles County or State of California.

One of the basic purposes of CEQA is to inform government decision makers and the public about the potential, significant environmental effects of proposed activities (CEQA Guidelines

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<sup>1</sup> ND, Page 2.

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

Section 15002(a)(1)). A negative declaration is appropriate when the Lead Agency finds that the project will not have a significant effect on the environment (CEQA Guidelines Sections 15070 to 15075). Reasons to support this finding shall be documented in the initial study. Without quantifying emissions from excavation activities, the ND has not made that documentation which serves as substantial evidence to support a fair argument that the Proposed Project would not have any adverse effects on air quality. Therefore, South Coast AQMD staff recommends that the Lead Agency identify the permitted hazardous disposal facility that the Proposed Project will use to dispose arsenic-contaminated soil and the locations that the Proposed Project will use to obtain clean soil, disclose them in the Final ND, calculate the Proposed Project's construction emissions from truck trips for hauling contaminated and clean soil based on the appropriate one-way trip length, and compare the construction emissions to South Coast AQMD's regional air quality CEQA significance thresholds to determine the level of significance for the Proposed Project's air quality impacts in the Final ND.

### *Mitigation Measures*

In the event that the Proposed Project results in significant adverse air quality impacts during construction, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. South Coast AQMD staff recommends that the Lead Agency require the use of zero-emissions (ZE) or near-zero emission (NZE) on-road haul trucks such as heavy-duty trucks with natural gas engines that meet the California Air Resources Board (CARB)'s adopted optional NO<sub>x</sub> emissions standard at 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. At a minimum, require the use of 2010 model year<sup>4</sup> that meet CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NO<sub>x</sub> emissions or newer, cleaner trucks. Include environmental analyses to evaluate and identify sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the Final ND, where appropriate. Include the requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.

### *South Coast AQMD Rules*

Arsenic is among the applicable toxic air contaminants listed in South Coast AQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants<sup>5</sup>. It is recommended that the Final ND and the Final Removal Action Workplan (RAW) include clarification on whether the DTSC, or other agencies listed in Rule 1466(b), have designated, or plan to designate, the site for the contaminant listed

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<sup>4</sup> CARB adopted the statewide Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. More information on the CARB's Truck and Bus Regulation is available at: <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

<sup>5</sup> South Coast AQMD. Rule 1466. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1466.pdf>.

as a concern subject to Rule 1466. Since more than 50 cubic yards of contaminated soil will be excavated, the site would be subject to South Coast AQMD Rule 1466 requirements if designated pursuant to the provisions of 1466(b)(1). It is recommended that applicable Rule 1466 requirements be incorporated into the Final ND and the Final RAW if the site is so designated. Additionally, the Final ND and the Final RAW should ensure excavation and soil movement operations will comply with South Coast AQMD Regulation IV-Prohibitions<sup>6</sup>, such as Rule 401 – Visible Emissions<sup>7</sup>, Rule 402 – Nuisance<sup>8</sup>, and Rule 403 – Fugitive Dust<sup>9</sup>.

### Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the ND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project. Further, when the Lead Agency makes the finding that the recommended mitigation measure is not feasible, the Lead Agency should describe the specific reasons supported by substantial evidence for rejecting it in the Final MND (CEQA Guidelines Sections 15070 and 15074.1).

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. If you have any questions or wish to discuss the comments related to CEQA air quality analysis and mitigation measures, please contact me at [lsun@aqmd.gov](mailto:lsun@aqmd.gov). If you have any questions or wish to discuss the comments related to South Coast AQMD rules, please contact Mr. John Anderson, Air Quality Analysis and Compliance Supervisor, at [janderson@aqmd.gov](mailto:janderson@aqmd.gov).

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS/JA

LAC201001-06

Control Number

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<sup>6</sup> South Coast AQMD. Regulation IV. Accessed at: <http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/regulation-iv>.

<sup>7</sup> South Coast AQMD. Rule 401. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-401.pdf>.

<sup>8</sup> South Coast AQMD. Rule 402. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf>.

<sup>9</sup> South Coast AQMD. Rule 403. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf>.

**Response to Comment #12:**

The Initial Study (Section 3) includes an estimate of emissions from proposed excavation and transportation activities. The proposed project is not anticipated to result in significant adverse air impacts.

The Initial Study identifies a non-hazardous disposal facility for estimating emissions since waste is assumed to meet disposal requirements as non-hazardous waste.

The RAW states that a dust monitoring plan will be prepared that will provide specific details and state the requirements called out for in Rule 1466.

The RAW has been revised to state that excavation will be performed in accordance with South Coast Air Quality Management District's Regulation IV – Prohibitions, including Rule 401 – Visible Emissions, Rule 402 – Nuisance, and Rule 403 – Fugitive Dust.