



MEMORANDUM

TO: Steve Mermell, City Manager

FROM: David M. Reyes, Director of Planning & Community Development Department

DATE: August 28, 2019

SUBJECT: 3202 E. Foothill Blvd. (Space Bank) – Alta Environmental Review of Removal Action Workplan

On August 5, 2019, the Department of Toxic Substance Control (DTSC) approved the Removal Action Workplan (RAW) for Space Bank mini-storage located at 3200 East Foothill Boulevard. As you are aware, the City has retained Alta Environmental to assist the City to better understand the technical requirements and process of DTSC's oversight of the clean-up of this site.

With Alta's support, the City Council formally prepared a comment letter on the Draft RAW.

We have asked Alta to review the approved RAW as well as DTSC's response to our comment letter for adequacy. The attached Memorandum from Alta addresses these issues as well as those presented in the "Addendum" which was made part of correspondence provided to the City Council by Councilmembers Masuda and Gordo, dated August 14, 2019.

All of these documents are located on the Planning Department's web page:

<https://ww5.cityofpasadena.net/planning/space-bank/>

Further, Alta has been retained by the City to act as a third party monitor of RAW related activities and both DTSC and the project applicant have agreed to Alta's role. Alta will provide periodic reports to the City regarding the clean-up of the site to ensure consistency with the RAW. These reports will be publically available on the website.

MEMORANDUM

TO: Mr. David Reyes

FROM: Mr. Mike Cassidy, PG, CHG

DATE: 8/28/19

SUBJECT: Naval Information Research Foundation DTSC Response to Public Comments

On March 8, 2019, the Department of Toxic Substances Control (DTSC) issued a public notice to initiate a 30-day public comment period on the proposed Removal Action Workplan (RAW) for the Space Bank Mini-Storage site (Site) located at 3200 East Foothill Boulevard, Pasadena, California. The comment period was subsequently extended from April 8 to May 14, 2019. This memo provides an analysis of the adequacy of DTSC's responses to comments, as well as our opinion of some of the statements in the "Addendum," which is a document that critiques DTSC's responses to comments. In addition, Alta is in receipt of a letter issued by Trammel Crow Company (the Developer) with an attached memo from Ninyo and Moore, the consultant and environmental experts for the Developer. This letter and attached memo help clarify several questions in the letter and Addendum.

In summary, Alta has reviewed the DTSC response to comments, the Addendum, and the May 13, 2019 letter from the City to Mr. Nick Ta of the DTSC, and the letter from the Developer with attached memo dated August 19, 2019. In our opinion, the DTSC responses to comments adequately address the questions posed by the City in their May 13, 2019 memo. Some of the questions were not answered by the DTSC as they are not environmental or regulatory in nature and/or outside of the role of the DTSC in this matter. Based on a conversation with Mr. Ta on 8/19/19, it is clear that in the opinion of the DTSC, the DRAW is satisfactory and appropriate for the intended use, with sampling for RDX, TNT, and PFAS added as a precaution (these will be addressed under a separate work plan). In addition, the DTSC supports third party oversight of the project by Alta so that the interests of the City and City residents can be represented. DTSC will also be overseeing the project and will be onsite on a schedule to be determined by the DTSC, and Alta will request coordination with DTSC during those onsite times. In the letter and memo from the Developer, they repeatedly confirm that they accept third party oversight, as stated at a previous City Council meeting. To provide additional assurances, Alta recommends that Alta meet with the Developer and/or with Ninyo and Moore, the consultant for the Developer, to raise awareness of and to discuss the public comments to the DRAW.

City's Formal Requests to Strengthen the DRAW and DTSC Response to Comments

Formal City Request #1 States:

1) Section 1.3.2 (Historical Site Use from 1945 to 1977) identifies various historical uses of the NIRF Site by the Navy, including research and development "primarily involving the design and testing of underwater weapons systems". Section 1.3.2 also discusses that "Numerous and varied laboratories were identified at the site including: combustion, chemistry, hydro-propellants, welding, hydrodynamics, structures, metallurgy, experimental physics, ballistics, and simulator labs.

According to the US EPA's November 2017 Technical Factsheets for hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) and for 2,4,6-trinitrotoluene (TNT), these chemicals were "Used extensively in the manufacture of munitions and accounts for a large part of the explosives contamination at active and former U.S. military installations." Based on this information, the City recognizes a potential for RDX and TNT to be a COPC for the NIRF Site and as such, recommends the development and implementation of a DTSC-approved sampling plan to investigate the presence of these chemicals onsite.

Addendum States:

The city requested a "DTSC-approved sampling plan" for RDX and TNT, and also "the use of third-party oversight, on behalf of the city," especially in "the DRAW's soil-management plan" (Pasadena, 2019, pp. 2-3). Although DTSC responded that "the developer is developing a work plan to sample for RDX and TNT" and PFAS (DTSC, Response, pp. 8, 191), DTSC made a nonresponsive reply to the city's request.

It said "there is no regulatory requirement for a third-party monitor, and therefore DTSC cannot impose this requirement" on the developer (DTSC, Response, p. 64). However, as "lead agency," the city can impose whatever requirements it needs to protect its residents, including third-party oversight of a toxic cleanup in its own city. This oversight is especially needed because of new information---released on February 27, 2019, seven months after the city council approved the project in July 2018. This new information is that the Joint CA Senate and Assembly Legislative Oversight Committee on DTSC concluded in 2019 that despite 7 years of "internal and external efforts to improve DTSC," DTSC continues to have "an inadequate and unresponsive regulatory program." The state oversight committee said DTSC is plagued with "glaring failings in...mishandling...enforcement;" "delayed site remediation;" "failed public participation and transparency activities," including "not properly enforcing state and federal law;" "likely using outdated technologies, practices, and safeguards" and "potentially releasing hazardous wastes into the environment" (CA Senate/Assembly, Oversight, 2019, pp. 9,7,4,5).

DTSC Specific Response to City Formal Request 1:

The developer, PGL, plans to develop a sampling work plan for DTSC review and approval to sample the site soil for RDX and TNT as part of the cleanup activities. Previously, these chemicals were not included in analytical tests because documented historical operations at this Navy research and development facility did not indicate such use. Soil testing for perchlorate, N-nitrosodimethylamine and Otto fuel – common propellant and fuel for torpedoes, rocket and missile - were non-detected, except for one sample with low detection of Otto fuel. The one low detection of Otto fuel indicates that this facility was not a manufacturing or testing of large weapons such as torpedoes, missiles, or rockets.

Alta Analysis/Response:

The DTSC acknowledged that they plan to review and approve the work plan to sample RDX and TNT that will be submitted by the Developer. Alta considers this responsive to the Formal City Request #1. As we understand our role, Alta will review and comment on the work plan and the results of the sampling and will provide comments to the City to ensure that the interests of the City and City residents are represented.

Formal City Request #2 States:

Section 6.3.2 (Evaluation of Removal Action Alternatives – Alternative 2) discusses the installation of a slurry cap as a mitigation measure to be implemented in the event that concentrations of metals and PAHs in soil are above cleanup goals when the limits of practicable soil removal have been met. However, we found no discussion of mitigation measures for concentrations of TPH in soil above cleanup goals. The City recommends clarification of the mitigation measures that would be employed if residual concentrations of TPH are identified above cleanup goals following confirmation sampling.

Addendum States:

Request 2. The city requested “clarification of mitigation measures” for TPH “following confirmation sampling” (Pasadena, 2019, p. 2), but instead of giving details of all post-confirmation mitigation measures, the DTSC requested no additions to the DRAW and made a nonresponsive reply to the city. This reply consisted of only one sentence that merely repeated facts from the RAW: “TPHs cleanup levels are provided in the proposed RAW...” (DTSC, Response, p. 63).

However, the city’s and Alta Environmental’s request for clarification of “mitigation measures” is critical because site confirmation testing covers only the (far-less-than-one-percent of) surface soils where suspected hot spots that were excavated; no confirmation sampling will be done on 99.5 percent of the site surface that are not suspected hot spots (Ninyo and Moore, RAW, p. 45, 63, 71). Yet, as the city and Alta Environmental request, clarification of site mitigation after confirmation testing is critically necessary because confirmation testing covers only the 12 tiny suspected hot spots, although the developer’s own data show that these tiny hot spots do not contain 80-95 percent of the onsite locations with the highest excess TPHs, VOCs, PAHs, and heavy metals (Ninyo and Moore, Remedial Investigation (RI), Appendix D, respectively, Table 7, 3, 9, 12). Thus, the onsite locations that most need confirmation testing won’t get it, and therefore site cleanup will be inadequate.

DTSC Specific Response to City Formal Request 2:

TPHs cleanup levels are provided in the proposed RAW (Chapter 5, Table 3), and additional excavation will be performed until confirmatory soil sampling shows soil concentrations of TPH are below the RAW remediation goals.

Alta Analysis/Response:

The DTSC acknowledged that the plan requires that additional excavation be performed until confirmatory soil sampling shows that concentrations of TPH are below the RAW remediation goals. Alta considers this responsive to the Formal City Request #2. As we understand our role, Alta will be onsite to observe the remediation and confirmation sampling, and confirm that the RAW is executed in full, and the interests of the City and City residents are represented.

Formal City Request #3 States:

Section 6.3.2 also discusses soil vapor confirmation sampling and the mitigation measures to be implemented in the event that soil vapor cleanup goals are not initially met. As currently written, an initial soil vapor survey will be completed following impacted soil removal operations. If VOC concentrations above cleanup goals are identified, the DRAW states that additional step-out soil

removal activities will be performed, and a second soil vapor survey will be completed following mass site grading activities.

The City questions the plan to conduct mass grading of an area with known elevated concentrations of VOCs in soil vapor. The presence of elevated soil vapor concentrations would indicate that the source of the VOCs has not been adequately removed and any mass grading operations would have the potential to spread these soil impacts across the NIRF Site. The City recommends clarifying the subject mass grading procedure and recommends including requirements to mitigate the potential for moving VOC-impacted soil to other parts of the property.

Addendum States:

Request 3. The city questioned 2 points in its third request. First, it questioned “mass grading of an area with known elevated...VOCs in soil vapor,” that is, “moving VOC-impacted soil to other parts of the property.” Second, it questioned “that the source of the VOCs” will not have “been adequately removed” (Pasadena, 2019, p. 3). In response to the city’s first charge in request 3 (challenging grading and moving contaminated soils from the north to the south part of the site), DTSC responded with a false claim: “The soil intended for mass grading is to be taken from the northern section of the site, which is considered to be clean soil” (DTSC, Response, p. 63). The soil in the northern part of the site is not “clean” regarding VOCs, as DTSC says, because the developer’s own data tables show that 87 percent of the site’s highest/not-allowed levels of carcinogenic VOCs are not in hot spots/drains (which will be removed). In fact, the developer’s own tables show that 96 percent of the high levels of carcinogenic VOC (that aren’t in hot spots) are from the northern part of the site---which thus is not clean). Moreover, the northern part of the site could not be clean, as the developer again admits that carcinogenic “VOCs were detected in soil gas throughout the site in all areas and at [all] depths”---and are the site’s main or highest “risk drivers,” whose dangerous “concentrations...are relatively uniform across the site” Thus there is no clean “northern” part of the site (Ninyo and Moore, Remedial Investigation (RI), p. 28 and RI, Appendix D, Table 3). In response to the city’s second charge in request 3 (that the “source” of the VOCs won’t be removed), the DTSC gave no reply whatsoever. The DTSC completely ignored the city’s request. Yet Alta Environmental and the city are right. If contaminant “sources” aren’t removed, pollution will continue virtually forever, land use controls will be needed virtually forever, property values will be harmed virtually forever, and people will be at risk virtually forever. Moreover (see discussion of city comment 5 below), because the site VOC “sources” won’t be removed and have not been characterized, either by giving 3-D coordinate dimensions or by tracing VOC-migration routes offsite, there is great potential for offsite harm, especially at the Kaiser Permanente Medical and Urgent- Care Facility that abuts the entire East site of the toxic site.

DTSC Specific Response to City Formal Request 3:

The soil intended for mass grading is to be taken from the northern section of the site, which is considered to be clean soil based on investigation data (Remedial Investigation & Feasibility Study, Ninyo & Moore, 2017). Excavated soil from identified hotspots and contaminated areas will be placed on heavy-duty construction-grade plastic sheeting to prevent contamination of clean soil underneath. Soil piles will be covered daily when not in use based on SCAQMD requirement.

Alta Analysis/Response:

The DTSC is correct that the soil in the northern section of the site is considered clean based on site investigation data, although there are likely VOCs in soil vapor present. The RAW includes

dust and vapor monitoring, which will be in place when the northern soils are disturbed, protecting workers and residents in the area. The letter and memo from the Developer received 8/19/19 confirm that mass site grading will not be conducted until after current soil gas levels are measured, and that soil gas and dust monitoring will be conducted as required in the RAW. Alta will be onsite to ensure that the RAW is satisfactorily implemented and to confirm that the interests of the City and City residents are represented.

Formal City Request #4 States:

The term Land Use Covenant, and in one instance Land Use Control, is referenced multiple times throughout Sections 6.3.2, 6.4.1, 6.4.2, and 6.4.9. as being required in the event that mitigation measures are needed for the protection of future site users. The City recommends that additional discussion be added to Section 6.3.2 for the purpose of informing the reader about the general use and benefit of LUCs and that no LUC shall be utilized if doing so could potentially expose children or adults to direct contact exposure to any contaminated soils.

Addendum States:

Request 4. The city requested information “about the general use and benefit of LUCs [land-use controls]” and the potential for “exposure to any contaminated soils” (Pasadena, 2019, p. 3) but DTSC made a nonresponsive reply to the city’s request, a response that merely repeated what was already in the RAW, but provided no discussion of the use and benefit of LUCs at the site. DTSC said: “The implementation of land use covenants (LUCs)...imposes appropriate limitations on land use to ensure that the site remains safe for its intended use. The cleanup goals as listed in the proposed RAW are protective of future residents” (DTSC, Response, p. 63). However, if the cleanup goals were truly protective of future residents, as DTSC claims, there would be no need for LUCs to protect against carcinogenic VOCs. Instead, LUCs are needed because the developer’s cleanup goals for carcinogenic VOCs---listed in the RAW (p. 37) and repeated by the DTSC in its response (pp. 15-16)---are far less protective than used in California today. For example, for trichloroethene or TCE (that causes cancer, child birth defects, and low IQ), the developer’s cleanup goal is 5213 times less safe than the most protective toxic-site cleanup levels, used in 2019 in the state of California (CAL-EPA,2019). There is no reason that the city must use less safe cleanup goals than the state of California requires, and thus to be forced to use land-use controls, especially because the developer admits that full cleanup of the site is “technologically feasible” (Ninyo and Moore, RAW, p. 51). The developer’s failure to use the current, most protective toxic-site cleanup goals is partly a result of new 2019 information that was released after the July 2018 approval of the SCEA. This new information is that in 2019 both CA DTSC and the CA Water Board introduced new, much more protective site-screening levels for toxic sites, based on updated toxicity findings. However, the CEQA process must be re-opened because the site RAW neither used these new 2019 screening levels (which also are typically used for site cleanup levels), nor did site tests capable of accommodating these new screening levels---given that the old (2007 and earlier) site tests had weak detection limits, incapable of meeting the new 2019 screening levels. Hence the CEQA process needs to be re-opened, so that new testing can be done using the latest screening levels that are thousands of times more protective than those used by the developer’s consultants.

DTSC Specific Response to City Formal Request 4:

The implementation of land use covenant (LUC), as provided in 22 CCR § 67391.1, imposes appropriate limitations on land use to ensure that the Site remains safe for its intended use. The

cleanup goals as listed in the proposed RAW are protective of future residents. The LUC is intended to be a contingency in case that residual impact cannot completely be mitigated for residential use without additional protection such as vapor intrusion mitigating system. See additional information on LUC in Responses 10 and 11 below.

Alta Analysis/Response:

The DTSC finds the cleanup goals in the RAW are protective of future residents, which will be confirmed by a Human Health Risk Assessment on confirmation sample results after remediation activities are conducted, as required by the RAW. In response to concerns in the Addendum, the new screening levels are used at the beginning of the site evaluation process to determine if a site requires further study, and this site has been extensively studied and is well past the screening stage.

Formal City Request #5 States:

The response action proposed in the DRAW is limited to relatively shallow soils beneath the NIRF Site. The City understands that a groundwater study implemented under DTSC oversight is planned for the subject site. However, at this time the groundwater and deeper soils beneath the NIRF Site have not been fully investigated or characterized. Therefore, the City recommends incorporating additional language to the DRAW discussing this topic and identifying the workplan as a shallow soil-only DRAW.

Addendum States:

Request 5. The city requested “incorporating additional language to the DRAW” because “groundwater and deeper soils...have not been fully investigated and characterized” (Pasadena, 2019, p. 3), but in response, the DTSC made a nonresponsive reply. This nonresponsive reply from DTSC merely re-stated what was already in the DRAW: “The groundwater well installation workplan will be developed as part of the cleanup activities. The Prospective Purchaser Agreement, a legal agreement between DTSC and PGL [the local LLC name of the developer Trammell Crow], established that groundwater investigation will be initiated by PGL” (DTSC, Response, p. 64). However, because the DTSC did not discuss and remedy the problem that the site has never been fully characterized (as the city and Alta Environmental point out in this comment), DTSC has not addressed 3 crucial site-characterization problems in the RAW. First, although full site characterization has not been done, both US EPA and CAL-EPA require full site characterization as a necessary condition for site cleanup. They both say that site characterization, at a minimum, requires (a) doing “representative sampling” for all site contaminants in all media, including soil, soil vapor, and groundwater; (b) determining “the three-dimensional distribution of each source” of each contaminant, and (c) determining “the distance over which [contaminant] releases have migrated”---none of which has been fully accomplished at the Pasadena site (US EPA, Guidance on Site Characterization, 1989, pp. 3-28; 2-10, 2-11, 2-12; 1-6; CA DTSC, Vapor Intrusion Guidance, 2011).

Second, because full site characterization has not been done, therefore no one knows either (b) above, 3-D contaminant-“source” distribution or (c) above, offsite contaminant migration. Yet because the developer’s Remedial Investigation shows extraordinarily high levels of soil VOCs within only feet of the large Kaiser Permanente medical and urgent-care facility (that abuts the entire east side of the toxic site, it is clear that full site characterization (including assessing offsite,

subsurface, contaminant migration under Kaiser Permanente) must be done before any site development.

Third, because full site characterization has not been done, the site RAW has not followed the CA DTSC guidance on vapor intrusion. This guidance clearly says that “uses of adjacent properties should be determined in order to evaluate potential exposure associated with offsite migration of subsurface contamination [through vapor intrusion and]....Public outreach should begin as soon as volatile chemicals are detected in the subsurface at locations near or adjacent to existing or proposed buildings [like the Kaiser Permanente medical facility]” (CA DTSC, Vapor Intrusion Guidance, 2011, pp. 4-5).

DTSC Specific Response to City Formal Request 5:

The groundwater well installation workplan will be developed as part of the cleanup activities. The Prospective Purchaser Agreement, a legal agreement between DTSC and PGL, established that groundwater investigation will be initiated by PGL.

Alta Analysis/Response:

DTSC did not respond to the request that the DRAW be designated a “soils-only” DRAW, and as confirmed in a conversation 8/19/19 they consider the DRAW to be satisfactory, although additional sampling will be conducted for RDX, TNT, and PFAS under a separate work plan. Alta concurs with the DTSC that the DRAW is satisfactory. It is unlikely that the site has a contribution to groundwater issues in the area, although the groundwater wells, and four groundwater monitoring and sampling events of those groundwater wells that were agreed to by the developer in the PPA should be able to confirm this.

Formal City Request #6 States:

The City, having an interest in the NIRF Site, has engaged an environmental consulting firm to provide third-party oversight of the RAW implementation. The City recommends memorializing the use of third-party oversight, on behalf of the City, in the DRAW’s Soil Management Plan.

Addendum States:

Request 6. The city requested “the use of third-party oversight, on behalf of the city,” especially in the DRAW’s soil-management plan (Pasadena, 2019, p. 3), but DTSC made a nonresponsive reply to the city’s request. This nonresponsive DTSC reply was that “there is no regulatory requirement for a third-party monitor, and therefore DTSC cannot impose this requirement” on the developer (DTSC, Response, p. 64). However, as “lead agency,” the city can impose whatever requirements it needs to protect its residents, including third-party oversight of a toxic cleanup in its own city. (See the discussion of Request 1 above, indicating that third-party oversight is especially needed because of new information. This new information is that in late February 2019, the state oversight committee confirmed that DTSC has failed as a regulator and cannot always be relied upon to protect citizens from toxic wastes---a fact that strengthens the city’s request for third-party oversight.)

DTSC Specific Response to City Formal Request 6:

There is no regulatory requirement for a third-party monitor, and therefore DTSC cannot impose this requirement onto PGL. However, DTSC understands the community concern, and will facilitate this discussion between the City and PGL for third-party monitoring of the removal action.

Alta Analysis/Response:

The DTSC declined to add a requirement to the DRAW Soil Management Plan for third-party oversight as there is no regulatory requirement for this, although they did offer to facilitate the discussion of this subject between the developer and the City. The Developer has confirmed that they accept the condition for third party oversight in the letter and memo dated 8/19/19.

Formal City Request #7 States:

The City requests that the DRAW make reference to the fact that groundwater testing will be done in conjunction with PPA and requests it be done prior to construction of the project to ensure that the project does not preclude future groundwater cleanup efforts, if needed.

Addendum States:

Request 7. The city requested “that groundwater testing...be done prior to construction...to ensure that the project does not preclude future groundwater cleanup efforts” (Pasadena, 2019, p. 3), but in response, DTSC made another nonresponsive reply. DTSC’s nonresponsive reply merely repeated what was in the RAW and claimed: “DTSC determines that the planned groundwater investigation is technically applicable for the site” (DTSC, Response, p. 64).

However, the city’s and Alta Environmental’s request for pre-construction groundwater testing is correct and absolutely necessary. Adhering to DTSC’s 2011 Vapor Intrusion Guidance requires mitigating VOC soil and groundwater sources and vapor intrusion prior to occupancy and demonstrating this fact through quantitative uncertainty analysis (DTSC, VIG, 2011, pp. 37 and also 17, 23, 24, 36, 40-41). Hence, the RAW---that rejects pre-construction groundwater testing and remediation---is contrary to the 2011 DTSC Vapor Intrusion Guidance.

US and CAL-EPA mandate that site soils cannot be remediated without prior groundwater testing. That’s why US EPA “technical guidelines” require testing groundwater, so as to locate soil-contaminant sources and their migration patterns; otherwise US EPA says “complete... remediation of... sources” is impossible (US EPA, 2015, pp. xv, 107, 146-147). Groundwater must be tested, prior to construction, so that any soil “sources” of toxins (that are contaminating groundwater) can be removed, prior to construction. Soil sources of groundwater contamination cannot be removed, once buildings are on the site, as DTSC admits (DTSC, Response, p. 53). If not, site land-use controls would have to be virtually permanent, because the soil-contaminant “sources” would continue pollution.

DTSC Specific Response to City Formal Request 7:

See Response 5 above. The PPA requires PGL to initiate a groundwater investigation with the installation of four wells and four sampling events. The planned locations for the wells, soil and groundwater sampling protocols were developed with DTSC oversight. DTSC determines that the planned groundwater investigation is technically applicable for the Site.

Alta Analysis/Response:

Although the DTSC declined to add a requirement to the DRAW for groundwater sampling, they do point out that the PPA requires four wells and four sampling events. This groundwater investigation should be adequate to determine if the Site is contributing to groundwater contaminant issues in the area and help determine if that contribution to groundwater contaminants (if indeed contribution exists) is a threat to human health and the environment.

Formal City Request #8 States:

The City expects DTSC to follow its Management Memo# EO-02-002-MM (“Memo”), including but not limited to: a full analysis and documentation to support the claim of technical impracticability of meeting the unrestricted-use scenario; and an explanation as to why this DRAW is relying on land use-restricting covenants when unrestricted use of the property is the goal.

Addendum States:

Request 8. The city requested “full analysis and documentation to support the claim of technical impracticability of meeting the [project site’s] unrestricted-use scenario, and an explanation as to why this DRAW is relying on land-use-restricting covenants when unrestricted use of the property is the goal” (Pasadena, 2019, p. 3). However, in response, DTSC made another nonresponsive reply. DTSC’s nonresponsive reply was that “DTSC will review site confirmation sampling and post-removal action soil gas survey results and will make the determination whether additional action is required with a site-specific human health risk assessment” (DTSC, Response, p. 64). Instead, DTSC needs to tell the city why the DRAW uses weak cleanup goals and therefore relies on land use controls. The city deserves an answer to this question because the developer admits that full cleanup is “technologically feasible” but not “practicably feasible” because it is more expensive and because the developer wants to finish any needed cleanup in only 3 months (Ninyo and Moore, RAW, pp. 51-52, 75).

DTSC Specific Response to City Formal Request 8:

DTSC will review site confirmation sampling and post-removal action soil gas survey results and will make the determination whether additional action is required with a site-specific human health risk assessment. The determination will follow DTSC existing technical guidelines and directives, including the Health and Ecological Risk Office Note 4 – Guidance for Screening Level Human Health Risk Assessments (May 14, 2109).

Alta Analysis/Response:

The DTSC response makes the point that they will be confirming compliance with existing current DTSC technical guidelines and directives, which are protective of human health, including the use of engineering controls, if they are deemed necessary. In our experience, the DTSC technical guidelines are protective of human health.

Formal City Request #9 States:

The City would like an explanation as to why a RAW is being proposed as to oppose to a RAP.

Addendum States:

Request 9. The city requested “an explanation as to why a RAW,” instead of a RAP, is being used for the site (Pasadena, 2019, p. 3). DTSC responded that “under state law, a remedial action plan is required for project that is estimated to be over \$2 million; typically considered to be more complex. This removal project is estimated to be \$1.913 million, therefore a removal action workplan was developed” (DTSC, Response, p. 64). However, the developer’s own documents show that even partial “cleanup” could cost \$2.2 million (eg, Ninyo and Moore, RAW, p. 52).

DTSC Specific Response to City Formal Request 9:

Under state law, a remedial action plan is required for project that is estimated to be over \$2 million; typically considered to be more complex. This removal project is estimated to be \$1.913 million, therefore a removal action workplan was developed. Both categories require a comprehensive review of site data, the development of alternative remedial actions analysis, public involvement, and the development and implementation of a removal or remedial action plan. Cleanup goals for both actions are the same enforceable standards that must be consistent with the proposed land use.

Alta Analysis/Response:

The DTSC has determined that a RAW is appropriate for this site and that the current DRAW is sufficient. In their response, they point out that the two types of documents are very similar, and the end result is similar.

Formal City Request #10 States:

Please provide an explanation as to whether the proposed slurry cap for Alternative 2 is a mitigation measure or a land use restricting covenant. If the latter, please provide a full analysis documentation to support the claim of technical impracticability of meeting the unrestricted-use scenario.

Addendum States:

Request 10. The city requested “an explanation” of “whether the proposed slurry cap” for the site “is a mitigation measure or a land-use-restricting covenant” (Pasadena, 2019, p. 3), but again the DTSC gives the city a nonresponsive reply. DTSC’s nonresponsive reply merely restates facts about slurry caps and LUCs and does not give any explanation. DTSC says “A slurry cap is a remedial method because it prevents further exposure of contaminants.....” (DTSC, Response, p. 64). However, the RAW (Ninyo and Moore, p. 46) says quite clearly that “if a slurry cap is placed on the site, a land use covenant (LUC) will be required,” and DTSC does not address this fact in its response. Moreover, if a slurry cap is placed on the site---instead of cleaning up deeper soil that has been shown to be contaminated---and then buildings are put on top of the soil, it will be impossible to later remove these soil- and water-contaminant “sources,” as DTSC admits (DTSC, Response, p. 53), and these “sources” could continue to pollute soil and groundwater, forcing site LUCs to be permanent.

Because DTSC failed to answer this and other city requests for information about site LUCs, the net consequences of site LUCs could be overwhelmingly negative. The health costs, economic-

development costs to the city, and stigmas costs of site LUCs could be extensive. As a result, LUCs could transfer many site liabilities to future Pasadena taxpayers.

DTSC Specific Response to City Formal Request 10:

A slurry cap is a remedial method because it prevents further exposure of contaminants. However, any residual contamination, i.e. chemical of concern that is left on-site above the residential standards, i.e. unrestricted use, would require a land use covenant (LUC) to ensure that the cap remains intact. The LUC specifies the restrictive land use conditions to be protective for the intended use of the property.

Alta Analysis/Response:

In Alta's opinion, the DTSC provided a correct and adequate response to the question. A land use covenant is an agreement attached to a property title or deed. A slurry cap is an engineering control that is commonly used on contaminated sites.

Formal City Request #11 States:

Pursuant to the Memo, please amend the DRAW to include an analysis of the adequacy of controls of the land use covenants for all proposed future uses.

Addendum States:

Request 11. The city requested "an analysis of the adequacy of controls, land-use covenants, for all proposed future uses" (Pasadena, 2019, p. 4), but again the DTSC gives the city a nonresponsive reply. DTSC's nonresponsive reply merely restates facts about LUCs and does not give any analysis. DTSC says "a land use covenant is a legal agreement between DTSC and the property owner that runs with the land. It is binding...." DTSC, Response, p. 64). Because DTSC failed to answer this and other city requests for information about site LUCs, see request 10 above for discussion of the net negative consequences of site LUCs.

DTSC Specific Response to City Formal Request 11:

A land use covenant is a legal agreement between DTSC and the property owner that runs with the land. It is binding upon owners and occupants, incorporated into deeds and leases and any conveyance of property, with all cost to be paid by the land owner. The legal agreement stays in effect until the residual contamination is fully addressed and the site is suitable for unrestricted use. A product of the LUC could be a soil management plan whereby any soil excavation will have to be managed in a specific manner to avoid the release of contaminants into the environment or create an exposure pathway to the residents.

Alta Analysis/Response:

The DTSC did not "... amend the DRAW to include an analysis of the adequacy of controls of the land use covenants for all proposed future uses" as the City had requested. Amending the DRAW is not the role of the DTSC, as Alta understands it. If the city requires an analysis of the adequacy of controls of the potential land use covenants they could request such an analysis from the Developer, and Alta could peer review the document.

Formal City Request #12 States:

Pursuant to the Memo, please amend the DRAW to include a discussion of the life cycle costs of any proposed land use covenant.

Addendum States:

Request 12. The city requested an analysis of “the life-cycle costs of any proposed land-use covenant” (Pasadena, 2019, p. 4), but again the DTSC gives the city a partially nonresponsive reply. DTSC’s nonresponsive reply merely states an opinion---without any analysis or economic documentation---that “Life-cycle cost of LUC is considered to be minimal” (DTSC, Response, p. 64). Because DTSC failed to answer this and other city requests for information about site LUCs, see request 10 above for discussion of the net negative consequences of site LUCs.

DTSC Specific Response to City Formal Request 12:

Life-cycle cost of LUC is considered to be minimal. In addition to filing fee to record the LUC and notification to tenants or property buyer, the property owner is required to submit to DTSC every 5 years a 5-year review letter reporting whether any actions involving the LUC were initiated, and how the activities were performed in accordance with LUC requirement.

Alta Analysis/Response:

The DTSC did not “...amend the DRAW to include a discussion of the life cycle costs of any proposed land use covenant” as the City had requested. Amending the DRAW is not the role of the DTSC, As Alta understands it. The lifecycle costs are not an environmental or regulatory concern, and not within DTSC’s area of oversight. The DTSC also states that “A land use covenant is a legal agreement between DTSC and the property owner that runs with the land. It is binding upon owners and occupants, incorporated into deeds and leases and any conveyance of property, **with all cost to be paid by the land owner.**” (DTSC response to City request #11; bold added for emphasis by Alta). Lifecycle costs could be discussed with the developer and their consultant, if a LUC is indeed required for the site.

Formal City Request #13 States:

Pursuant to the Memo, please amend the DRAW to include an analysis of the difference in property value of an unrestricted site compared to a site with land use-restricting covenant(s).

Addendum States:

Request 13. The city requested an analysis of “the difference in property values of an unrestricted site compared to a site with land use restricting covenants” (Pasadena, 2019, p. 4), but DTSC did not answer the question. Instead DTSC replied that “DTSC does not perform calculation of property value based on whether a land use covenant is needed for the site. This is not an environmental issue and is not germane to the DTSC’s approval of the RAW” DTSC, Response, p. 64). However, DTSC’s response is questionable because CEQA law clearly says that “in describing and evaluating a project in an environmental review document...the lead agency [the city] may consider specific economic, legal, social, technological, or other benefits...and the

negative impacts.... Any benefits or negative impacts considered... shall be based on substantial evidence in light of the whole record. §21082.4.

Thus, the city is completely within its rights to ask DTSC to force the developer to analyze and calculate the potential economic gains or losses to the city, as a result of LUCs. After all, the developer is using LUCs, mainly because it is cheaper for him than full cleanup (Ninyo and Moore, RAW, pp. 51-52, 75), so the city has a right to know what costs, if any, will be imposed on the city and on taxpayers because of the developer's desire to use LUCs.

DTSC Specific Response to City Formal Request 13:

DTSC does not perform calculation of property value based on whether a land use covenant is needed for the site. This is not an environmental issue and is not germane to the DTSC's approval of the RAW, which is intended to be protective for the proposed residential use without regard to property value.

Alta Analysis/Response:

The DTSC did not "...amend the DRAW to include an analysis of the difference in property value of an unrestricted site compared to a site with land use-restricting covenant(s)" as the City had requested. Rather the DTSC states that property value "is not an environmental issue and is not germane to the DTSC's approval of the RAW." Alta concurs with this statement.

The addendum states "Thus, the city is completely within its rights to ask DTSC to force the developer to analyze and calculate the potential economic gains or losses to the city, as a result of LUCs...". However, this does not appear to be the way the request was stated to the DTSC in the City's May 13, 2019 correspondence sent to the DTSC, in which the City stated "Pursuant to the Memo, please amend the DRAW to include an analysis of the difference in property value of an unrestricted site compared to a site with land use-restricting covenant(s)." This request appears to ask the DTSC to conduct, and not for the DTSC to direct the developer to conduct the analysis.
