June 13, 2008

VIA EMAIL AND ALAMEDA COUNTY FTP SITE

Mr. Paresh Khatri
Alameda County Environmental Health
1331 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Request for "Comfort/Developability Letter" and Expedited Schedule**
5175 Broadway, Oakland, California, ACEH Fuel Leak Case No. RO0000139

Dear Mr. Khatri:

On behalf of Rockridge Heights, LLC, Pangea Environmental Services, Inc (Pangea) has prepared this request letter in response to Alameda County Environmental Health (ACEH) directive letter dated June 10, 2008. This letter states our immediate project goals and presents a request for both an expedited regulatory project review schedule and a "comfort/developability letter" to help facilitate development. To help substantiate our requests we have also provided responses to the items in your June 10, 2008 directive letter. Please note that, as previously discussed with you, timely and favorable responses to our requests are needed to help avert significant serious financial impacts to our client.

IMMEDIATE PROJECT GOALS

The primary goal of this letter is to establish a tentative schedule for ACEH issuance of a 'regulatory comfort letter' and subsequent letter approval of site remediation plans. The "comfort/developability letter" would be used by the site owner to inform its lending institution and other involved parties that site development can proceed at the site on a reasonable schedule and that potential hazards associated with subsurface chemicals can be sufficiently addressed before, during and/or after the development process to meet agency requirements.

The secondary goal is to have faster ACEH responsiveness and more communication from ACEH during the regulatory review process via telephone conversations, email and especially meetings. Pangea plans to provide the information requested by your June 10, 2008 within a few weeks so the ACEH can review and ultimately approve the site remediation plans soon thereafter. During our telephone conversation today you indicated that you will be able to meet with us, expedite future reviews (now that you are familiar with the case), and issue a response letter about the remediation plan very quickly. We thank you in advance for this responsiveness.

The ultimate goal is to obtain development approval to avoid the real and imminent bankruptcy for the site owner, which has resulted primarily from to the downturn in the overall economy and very slow pace of ACEH responsiveness to date. We also hope the ACEH continues its recent responsiveness and demonstrates its commitment to not 'hinder site redevelopment' as stated in its June 10, 2008 letter by issuing a "comfort/developability letter" and expediting future review and remediation plan approval.

We acknowledge the recent expeditious case review by Mr. Khatri shortly after his assignment to the subject case and hope this responsiveness continues. However, please note that the ACEH's overall

unresponsiveness over the duration of this project to date has already hindered site redevelopment and significantly impacted the site owner. Pangea has submitted four significant reports commencing in November 2006 and did not receive any written response until the June 10, 2008 letter, which is over 18 months. The reports included an *Addendum to Preliminary Results of Site Characterization:Proposed Additional Activities* dated November 6, 2006, a *Site Investigation Report* dated July 17, 2007, a *Soil Gas Sampling and Well Installation Report* dated October 23, 2007, and a *Feasibility Test Report and Interim Remedial Action Plan* (IRAP) dated July 20, 2007. Despite repeated requests for timely regulatory oversight and meetings, the ACEH did not provide written comments on the IRAP until yesterday, June 10, 2008. The current ACEH requests could have been addressed a long time ago to avoid 'unanticipated delays in site redevelopment'.

EXPEDITED SCHEDULE

Pangea aims to provide the requested information within a few weeks to allow the ACEH to issue approval of site remediation plans. Our proposed expedited schedule is:

June 20, 2008 ACEH Issues "Letter of Developability" or "Comfort Letter".

July 14, 2008 Pangea provides *Additional Soil Gas Sampling Report, Revised Site Conceptual Model, and Corrective Action Plan* (essentially a revised IRAP). Proposed construction plans provided to ACEH.

July 21, 2008 Project meeting at ACEH offices between ACEH and Pangea (and other involved parties as merited).

July 28, 2008 ACEH issues letter providing full or conditional approval of the Corrective Action Plan (assuming ACEH requirements sufficiently addressed).

While the ACEH's schedule in the June 10, 2008 letter provides ample time for requested reports, adherence to such a schedule would undoubtedly result in severe financial harm to our client. This expedited schedule listed above is important for the reasons stated in the preceding section. Please confirm that the ACEH will make all efforts to meet this schedule to not hinder redevelopment.

LETTER OF DEVELOPABILITY / "COMFORT LETTER"

The June 10, 2008 ACEH letter states:

> *"ACEH understands that the proposed site redevelopment has been approved by the City of Oakland's Planning Department. In an interest to continue site remediation in conjunction with proposed redevelopment, please submit the proposed construction schedule by [July 24, 2008]. Please note that ACEH does not wish to hinder site redevelopment, however, it is imperative that site remediation is initiated in a timely fashion so that unanticipated delays in site redevelopment are not incurred."*

This statement indicates that the ACEH will allow site remediation to continue in conjunction with proposed redevelopment, and that the ACEH does not wish to hinder site redevelopment. Therefore, to not hinder the redevelopment process, please issue a 'Letter of Developability" or equivalent (commonly referred to informally as a "comfort letter" by local regulatory agency staff). The "letter of developability" would be

used by the site owner to inform lending institutions and other involved parties that site development can proceed at the site on a reasonable schedule and that potential hazards associated with subsurface chemicals can be addressed before, during and after the development process to meet agency requirements. The letter may acknowledge that the selected remedial alternative and cleanup levels/goals can be established in the near future. Please let us know if you need any specific information to facilitate preparation of this requested letter.

RESPONSE TO ACEH TECHNICAL COMMENTS

Pangea offers these responses to ACEH technical comments. In general, Pangea feels that most of the requested technical information has been previously provided in the reports described above, and that the ACEH had sufficient information to provide IRAP approval. In addition, a short meeting or discussion could have addressed ACEH issues or resulted in a significantly shorter ACEH comment letter. A point-by-point discussion of the items listed in the ACEH's June 10, 2008 letter is given below.

1. Additional Soil Gas and Offsite Subslab Soil Vapor Sampling

Thank you for the approval of Pangea's proposed soil gas and offsite subslab soil vapor sampling proposed in our *Soil Gas Sampling and Well Installation Report* dated October 23, 2007. We will conduct the approved sampling in the very near future. However, Pangea feels that existing data indicates that additional soil gas/vapor sampling efforts need *not* delay remediation plan approval. Furthermore, we are concerned about comments presented in the ACEH letter.

The ACEH letter expresses concern about the detection of tracer gas in the sampling and recommends using a shroud and tracer gas measurement using a photoionization detector (PID). However, as detailed on page 3 of the *Soil Gas Sampling* report, Pangea did use a shroud and PID in the manner requested by ACEH. Furthermore, Pangea collected a time-integrated Summa canister sample from within the leak-check shroud to allow quantitative evaluation of any detected leak-check compound. This analysis was conducted due to the common reporting of low concentrations of leak-check compound in samples collected during studies of this nature (due to both leaks and cross-contamination of sampling equipment and media), as reported both in the literature and by analytical laboratories. On page 4 of the report, Pangea calculated a maximum leak of 0.7% of the sample volume (assuming that the detected leak-check compound within the sample was entirely from leaks and not from cross-contamination of sampling equipment). This low apparent leak/cross-contamination magnitude is considered to be insignificant and verifies that the samples collected were representative of soil gas conditions beneath the site.

We are surprised to receive critical comments regarding this topic, since the comments pertain to issues that were addressed and discussed in detail in the submitted report, and seem to reflect an incomplete review of the findings before providing agency comments. We feel that additional communication or a meeting regarding the concerns expressed could have assisted ACEH with their evaluation and eliminated the need to bring this topic up as an issue of concern. Given the slight exceedence of conservative Environmental Screening Levels (ESLs) and the well-documented and rigorous soil gas sampling methods used, Pangea feels that although further assessment is merited, completion of the more comprehensive additional sampling of offsite soil gas and subslab soil vapor recommended by Pangea need not delay IRAP approval. The sampling could even be conducted in conjunction with site remediation, especially since offsite soil gas and subslab vapor concentrations will likely significantly decrease during and after site remediation.

2. Interim Remedial Action Plan (IRAP)

The ACEH did not approve the IRAP at this time. For reasons stated in this section and elsewhere in this letter, Pangea feels that sufficient information was provided to the ACEH to support granting full or conditional approval of the IRAP, especially given site-specific issues and the opportunity to meet and address any agency concerns. We feel that the ACEH could approve the current IRAP, or a slightly revised IRAP contingent upon specific conditions regarding establishing of cleanup levels/goals prior to IRAP implementation and/or building occupancy, and the collection of the approved additional offsite soil gas sampling.

The ACEH states that excavation is not adequately justified by soil analytical data. While Pangea generally concurs with this conclusion, this comment and the ACEH letter do not acknowledge the other extensive information provided for the site (soil type, groundwater conditions, feasibility testing, remedial alternative evaluation, contingencies and cost analysis) that do substantiate the appropriateness of the proposed approach. Under the planned subgrade excavation, the excavation remediation alternative with biosparging and other contingencies is a rational and cost effective approach. The development excavation provides cost savings by expediting site cleanup, reducing longer-term in situ remediation and groundwater monitoring costs, avoiding extensive backfill material costs, allowing faster access to deeper residual contamination, and using inexpensive oxygen (in air) to target residual contamination in the deeper hard bedrock that is not very amenable to more aggressive in situ remediation techniques.

Again, several agency comments indicate that the ACEH may not have fully evaluated the reported findings before commenting. By citing the lack of soil data below 15 ft depth, the ACEH does not acknowledge that this deeper zone consists of hard bedrock for which soil sample collection and analysis could not be performed (The rock was so hard in some locations that drilling refusal was experienced at approximately 10 ft depth even after remobilizing to the site with a powerful CME-75 drill rig). The ACEH states that the disposition of the soil overburden was not provided, but page 20 of the IRAP discusses possible reuse of all overburden soil with ACEH approval and optional offsite disposal (the conservative cost analysis assumes that overburden soil is disposed offsite). Page 24 of the IRAP discusses soil profiling for landfill disposal. All offsite disposal of soil would be conducted at an appropriate licensed facility. The ACEH states that the fill material was not specified, but "Task 6 – Backfilling" on page 24 of the IRAP discusses the types of material that will be used for backfill. Pangea could have clarified this information for ACEH during their review if these concerns had been communicated previously.

The ACEH is concerned about inadvertent discharge of impacted groundwater to the sewer via a construction or permanent dewatering system. Pangea had already informed the site owner and representatives of need for potential water storage, treatment and/or offsite disposal to comply with applicable laws and agency requirements. Page 22 of the IRAP indicates that pumped groundwater will be disposed of properly. Note also that, as described in the IRAP, groundwater yield is very low in all wells at the site, so it is unlikely that significant volumes of groundwater would be generated. This concern could be addressed as a condition of IRAP approval and need not delay IRAP approval.

Pangea's IRAP included a discussion of risks, receptors and use of appropriate ESLs, including consideration of the excavation that would change the risk scenario. To further address ACEH concerns, Pangea will expand the discussion in the requested CAP.

3. Site Conceptual Model (SCM)

The ACEH states that it *may* be advantageous to develop a SCM, but the ACEH does not acknowledge that Pangea already prepared a SCM that is presented as Item 1 of the Addendum dated November 8, 2006. This SCM was provided in response to a request for an SCM made by ACEH in a letter dated December 22, 2005, and included all of the components requested in the June 10, 2008 ACEH letter except for plots of chemical concentrations versus time (time/concentration trends were discussed in narrative form) and well logs, boring logs and survey maps (this information had been presented earlier in the report to which our report was an addendum to, and previous reports). Information that modified and enhanced the original SCM has also been provided and discussed by Pangea in subsequent reports. Consistent with SCM elements, the IRAP and other provided reports compared tabulated data to ESLs and potential receptors to evaluate risk under current site use and proposed redevelopment. Although Pangea feels sufficient SCM information has been provided, Pangea agrees to prepare a revised standalone SCM that will include all of the listed elements to facilitate ACEH approval of site remediation plans.

Since the ACEH has recently expressed potential concern at other sites about data gaps involving subsurface vapor monitoring, Pangea's revised SCM and CAP will address this issue. Pangea notes that the ACEH recently approved Pangea's site remediation plans at *other sites*, with conditions requiring installation of an additional vapor monitoring point at one site and clarifying cleanup levels/goals at another site. Pangea had requested verbally and in writing that the ACEH manage any such requirement for this site in a similar manner to avoid further delay.

4. Corrective Action Plan (CAP)

The ACEH has requested preparation of an FS/CAP and cites typically required elements of the FS/CAP. The submitted IRAP included elements of an FS/CAP required by the ACEH, including "at least three viable alternatives" and a cost-effectiveness analysis as required in the ACEH June 10, 2008 letter. Furthermore, the IRAP also presented actual site feasibility testing information used to select the most appropriate and cost-effective remedial approach, as required by the California UST Cleanup Fund.

Pangea agrees that "no action" and monitored natural attenuation (MNA) were not formally listed as alternatives in the IRAP. However, given the site conditions described in the IRAP, and in prior reports, these are not realistic alternatives. The SCM submitted in Pangea's November 8, 2006 Addendum and the discussion in the IRAP both specifically noted that concentrations of COCs in groundwater have stayed relatively constant over more than a decade, indicating that natural attenuation mechanisms are not effective. Therefore, MNA would not be an applicable alternative.

The "no action" alternative is also not realistic because, as noted in the IRAP, concentrations of COCs in onsite groundwater, site perimeter soil gas and offsite subslab vapor samples all exceeded applicable ESLs and free product was present at the site. These findings clearly indicate a continuing threat to water quality goals and human receptors. It should also be noted that during Pangea's onsite DPE test documented in the IRAP, a maximum of 2,071 ppmv (equivalent to approximately 7,300,000 $\mu g/m^3$) TPHg and 6.2 ppmv (19,807 $\mu g/m^3$) benzene were detected in the vapor effluent samples. These concentrations are likely representative of the magnitude of soil vapor chemical concentrations and are many orders of magnitude greater than the commercial/industrial soil gas ESLs for TPHg (5,100 $\mu g/m^3$) and benzene 140 $\mu g/m^3$.

ACEH requests FS/CAP preparation after further delineation of soil vapor. While Pangea will comply with this request, we feel that the soil vapor plume is adequately delineated *offsite* to allow approval of the IRAP. It is not considered appropriate to conduct further *onsite* soil vapor sampling at this time because

redevelopment and remediation activities will undoubtedly result in significant changes to soil gas levels and pathways so that sampling conducted at present would not be representative of near-future site conditions, and would not affect decision-making.

Pangea's IRAP included a discussion of risks, receptors and use of appropriate ESLs. In response to the ACEH request, site-specific cleanup levels and cleanup goals will be presented in the CAP.

5. Redevelopment / Construction Schedule

This ACEH comment is discussed above. The proposed construction schedule will be provided by the date specified in the expedited schedule. We look forward to the ACEH's efforts to not hinder site redevelopment.

CLOSING

Pangea looks forward to working closely and quickly with the ACEH to address agency needs while not further hindering site redevelopment. Pangea respectfully requests that the ACEH issue a Letter of Developability and contact Pangea with any questions regarding letter issuance. Thank you in advance for your assistance on this very sensitive and urgent project.

The letter will be submitted to the ACEH via uploading to the Alameda County ftp site. As requested, Pangea will not submit a hard copy to the ACEH. If you have any questions, please call me at (510) 435-8664.

Sincerely,
Pangea Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer

cc: Rockridge Heights, LLC, C/O Gary Feiner, 34 Schooner Hill, Oakland, California 94618