MORASH, MELANIE

From: MORASH, MELANIE
Sent: Tuesday, December 22, 2015 10:06 AM
To: J. Wesley Hawthorne
Cc: Connell, Rebecca; Parker, Heather; Elizabeth Brown; Heather O'Cleirigh; Joseph Innamorati; Linda Niemeyer; Michele Yuen; Morgan Gilhuly; Nancy-Jeanne LeFevre; Peter Bennett; Peter Scaramella; Rebecca Mora; Shau Luen Barker; Shaun Moore; Soetebier, Kristen; Todd Maiden; Wendy Feng; Cynthia Woo; Lawrence McGuire; Leslie Lundgren; Rafael Rangell; Rose Condit; Wenqian Dou; DIAZ, ALEJANDRO; Estrada, Thelma; Harris-Bishop, Rusty; Lyons, John; Maldonado, Lewis; Plate, Mathew; Shaffer, Caleb; Stralka, Daniel; Yogi, David; Parker, Heather
Subject: EPA's Conditional Approval - Triple Site Mitigation Plans - Residences #21, 84/85, 105/124/125

Good morning, Wes,

Thank you for submitting revised mitigation plans and the response-to-comments letter for the three residences referenced above.

This e-mail conveys EPA's conditional approval of these mitigation plans.

As discussed in your response letter, please plan to provide your Health and Safety Plan (HASP) Addendum to EPA for review, and the Operations, Maintenance & Monitoring (OMM) Plans and Quality Assurance Project Plan (QAPP) Addendum to EPA for review and approval within ten (10) calendar days of the property owner's approval of the mitigation plans.

Please also plan to provide EPA with mitigation plans for the remaining three residential buildings (RES # 71/99, 92/93, and 100) by Friday, January 8th 2016.

EPA will provide these mitigation plans to the property owners shortly, accompanied by the cover letter that you and the RP group recently reviewed. We will copy you when these plans are mailed out.

These mitigation plans should be finalized and submitted to EPA within ten (10) calendar days of discussions/meetings with property owners/occupants and receipt of property owners' approval to proceed. The finalized mitigation plans must address the following comments:

Additional Comments

1. HASP - TCE Air Monitoring Following Crawlspace Ventilation. Following crawlspace ventilation and prior to worker entry, crawlspace air samples can be obtained via either grab samples (TO-15 canister sampling) or via 24-hour samples (TO-15 canister sampling or passive sorbent sampling) and analyzed via rush 24-hour turn-around-time (TAT). Field-portable gas chromatography-mass spectrometry (GC/MS) units (such as the Inficon HAPSITE) have been successfully used to identify and quantify VOCs, including TCE, in vapor intrusion investigations with turn-around-times (TATs) of less than 10 minutes and method detection limits (MDLs) generally less than 1 microgram per cubic meter (ug/m3) for TCE.

See, for example, this paper: http://onlinelibrary.wiley.com/doi/10.1111/j.1745-6592.2011.01357.x/pdf describing a VI investigation at Hill Air Force Base in Utah, with a corresponding MDL of 0.4 ug/m3 for TCE using the GC/MS analysis.

2. Inspection Frequency - The plan proposed quarterly inspections during the first year of operation and then annually thereafter. Decreased inspection/ maintenance frequency may be acceptable once efficient system operation has been demonstrated for a year, and only following EPA's approval to do so.

3. Sampling Frequency - The plan proposes post-mitigation sampling 1 to 2 weeks following installation, a month following initial sampling, and then during the first winter and spring of operation. The plan should be modified to include a second round of wintertime testing (following the spring sampling round). Following this second wintertime sampling round, a proposal can be submitted for EPA's approval to decrease the sampling frequency, if the previous sampling results are supportive.

4. Screening Levels - Because the samples collected from each building represent only a snapshot of potential vapor intrusion, the system should be designed to outperform these requirements with a level of confidence. The goal for abatement in the crawlspace should be 0.48 ug/m3 for TCE - the long-term screening level - given the high variability of vapor intrusion and EPA's recommended attenuation factor of 1 for crawlspaces (assumption of no attenuation via the porous boundary between crawlspaces and indoor air). If concentrations at or below 0.48 ug/m3 cannot be achieved in the crawlspace, the crawlspace concentrations must be evaluated closely within the context of the narrow risk range for TCE. Concentrations above the low end of the risk range will prompt more frequent monitoring or, as appropriate, the development and implementation of an alternative response strategy to verify that levels continue to remain protective over time.

5. Sampling Port - EPA will evaluate your response regarding the location of the sampling port, and may have additional comments to convey regarding this item.

EPA may withdraw approval of these plans in the event that the final plans, submitted to EPA following property owner approval, do not satisfactorily address the following items:

- consideration of comments above
- complete engineering specifications included in final plans, following discussions with owners/occupants
- complete and detailed as-built documentation following installation of mitigation systems
- detailed OMM plans which include quality assurance procedures for mitigation system operation and monitoring

Regards,

Melanie Morash

Melanie Morash, Project Manager
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-----Original Message-----
From: J. Wesley Hawthorne [mailto:hawthornej@locustec.com]
Sent: Monday, December 21, 2015 6:27 PM
To: MORASH, MELANIE <morash.melanie@epa.gov>

Cc: Connell, Rebecca <Connell.Rebecca@epa.gov>; Parker, Heather <Parker.Heather@epa.gov>; Elizabeth Brown <elizabeth.c.brown@ngc.com>; Heather O'Cleirigh <heather.ocleirigh@amd.com>; Joseph Innamorati <joseph.innamorati@philips.com>; Linda Niemeyer <linda.niemeyer@ngc.com>; Michele Yuen <myuen@reedsmith.com>; Morgan Gilhuly <rmg@bcltlaw.com>; Nancy-Jeanne LeFevre <LeFevren@locustec.com>; Peter Bennett <pbennett@haleyaldrich.com>; Peter Scaramella <pscaramella@haleyaldrich.com>; Rebecca Mora <rebecca.mora@aecom.com>; Shau Luen Barker <shauluen.barker@philips.com>; Shaun Moore <shaun.moore@amd.com>; Soetebier, Kristen <KSoetebier@ReedSmith.com>; Todd Maiden <tmaiden@reedsmith.com>; Wendy Feng <wfeng@cov.com>; Cynthia Woo <cynthia.woo@cbifederalservices.com>; Lawrence McGuire <l.mcguire@circlepoint.com>; Leslie Lundgren <leslie.lundgren@cbifederalservices.com>; Rafael Rangell <r.rangell@circlepoint.com>; Rose Condit <rose.condit@cbifederalservices.com>; Wenqian Dou <wenqian.dou@cbifederalservices.com>; DIAZ, ALEJANDRO <Diaz.Alejandro@epa.gov>; Estrada, Thelma <Estrada.Thelma@epa.gov>; Harris-Bishop, Rusty <Harris-Bishop.Rusty@epa.gov>; Lyons, John <Lyons.John@epa.gov>; Maldonado, Lewis <Maldonado.Lewis@epa.gov>; Plate, Mathew <Plate.Mathew@epa.gov>; Shaffer, Caleb <Shaffer.Caleb@epa.gov>; Stralka, Daniel <Stralka.Daniel@epa.gov>; Yogi, David <Yogi.David@epa.gov>
Subject: RE: EPA's Additional Comments - Mitigation Plans - Residences #21, 84/85, 105/124/125 - Please submit revised plans responsive to comments by Monday, Dec. 21st

Melanie:

Attached are revised mitigation plans to address your comments, as well as a letter explaining the revisions responding to each of your comments.

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