

Wickham, Jerry, Env. Health

From: Ricky Bradford [rbradford@aeiconsultants.com]
Sent: Monday, April 30, 2007 11:47 AM
To: Wickham, Jerry, Env. Health
Cc: 'Robert F. Flory'; 'Peter McIntyre'
Subject: Omega Termite - 807 75th Avenue, Oakland
Attachments: Crawl Space Soils 012.jpg; Crawl Space Soils 004.jpg

Jerry:

I wanted to send you a follow-up email regarding ozone remediation, the groundwater monitoring schedule, and other vapor intrusion concerns at the subject site.

Since our conversation, we have completed the installation of the sub-membrane depressurization (SMD) system. The SMD system removes hydrocarbon vapors before they can collect in the crawl space and migrate into the main building. Large vertical fractures in the soils were readily identified in the crawl space but have not been evident during past drilling onsite. However, this may help explain the contaminant distribution between shallow, intermediate, and deep zones onsite. Refer to the attached photos.

Prior to this, we attempted direct crawl space ventilation as the more-simple and cost-effective engineering control. However, it soon became evident that there were too many dead spaces and a SMD would be necessary. The main difference is that a SMD system incorporates a vapor barrier, such as a 6 mil polyethylene liner, installed over a network of slotted extraction pipes, whereas a direct crawlspace ventilation system uses slotted pipe without a vapor barrier. Direct crawl space ventilation attempts to grab the vapors from the crawl space air and sub-membrane depressurization prevents vapors from making into the crawl space.

Description and details of the SMD system will be provided in the upcoming system installation and startup report. The ozone sparging system is currently off (as it has been for the last three to four weeks) and will be restarted this week in conjunction with the SMD system. The performance of the SMD system will also be tested and evaluated at this time. Interlocks will be installed to shutdown the ozone sparger if the SMD system fails. The Bay Area Air Quality Management District will also be contacted to discuss the SMD system operations and possible permitting requirements.

AEI also proposes to cancel the 2nd Quarter, 2006 groundwater monitoring event as it will not provided any further useful information regarding baseline site conditions that are not already known. Please respond if you also concur with this recommendation.

Best Regards,

Ricky Bradford

Senior Staff Engineer
AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597
P: (925) 944-2895 ext.148
F: (925) 944-2895
rbradford@aeiconsultants.com