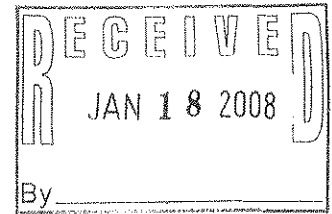

**Geomatrix, "Letter to the Department of Toxic Substances Control
Regarding the Former Whittaker-Bermite Facility, Santa Clarita, CA --
Summary Report for Month of November 2007" (January 15, 2008)**



Geomatrix



January 15, 2008
9967

Sayareh Amir
Department of Toxic Substances Control
Site Mitigation Branch
1011 N. Grandview Avenue
Glendale, CA 91201

Subject: Former Whittaker-Bermite Facility, Santa Clarita, CA
Summary Report for Month of November 2007

Dear Ms. Amir:

This letter constitutes a progress report for the month of November 2007, prepared pursuant to Task 4 and Section 6.3 of the "Imminent and Substantial Endangerment Determination and Order and Remedial Action Order" (the Order) that the Department of Toxic Substances Control (DTSC) issued on November 22, 2002 for the former Whittaker-Bermite facility (site) in Santa Clarita, California.

SECTION I – SITE WIDE ISSUES

Specific actions taken on behalf of the respondent, actions expected to be undertaken, and planned activities for site-wide issues are summarized in the following:

PUBLIC PARTICIPATION

Activities for This Report Period

Cerrell Associates Inc. team provided the following services in support of the project and on behalf of the Whittaker Corporation during the month of December 2007.

Researched DTSC EnviroStor web site Community Outreach section for Bermite updates.

Regularly monitored the Community Information Line for messages and/or inquiries from area residents.

Regularly monitored and updated client and DTSC on Bermite site-related media coverage by the *Los Angeles Daily News*, *Santa Clarita Signal*, and other area media outlets.



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Anticipated Activities for This Month

Continue supporting DTSC's public outreach activities and assist with updating the DTSC's Web site (www.envirostor.dtsc.ca.gov) as necessary.

UXO/OE CLEARANCE ACTIVITIES

Activities for This Report Period

EOD Technology, Inc. (EODT) has developed a scope of work for ordnance survey and clearance of the areas referenced in the Historical Site Assessment (HSA) Report. The EODT work plan addresses the specific areas that require survey and clearance for potential scattered UXO. The scope of work of the geophysical sweeps includes the detection procedure and equipment to be utilized, and the quality control program to be followed. A draft of the document was submitted to the insurance company (AIG) for review to ensure coverage and budget allocation. AIG provided comments and requested clarifications of scope items which EODT provided responses. EODT has revised the work plan for the surface area sweeps that has incorporated AIG's comments. The revised document has been sent to AIG's technical team for final review.

Anticipated Activities for This Month

Following AIG's concurrence with the scope of work and fund allocation, the work plan for geophysical clearing of the specific target areas will be submitted to DTSC for review and approval prior to implementation.

Long-Term Actions

Following DTSC's review and approval of the scope of geophysical sweep activities, the specific areas addressed in the HSA Report will be swept and surveyed for UXO/ordnance and explosives.

SECTION II – SOIL ISSUES

Specific actions taken on behalf of the respondent, actions expected to be undertaken, and planned activities for soil issues are summarized in the following sections:



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RI AND RCRA MONITORING

Activities for This Report Period (1)

All Remedial Investigation (RI) activities for characterization of soils have been completed. No additional soil RI work is anticipated.

Activities for This Report Period (2)

Geomatrix submitted a letter to DTSC on July 24th 2006 requesting DTSC's agreement to incorporate the current Resource Conservation and Recovery Act (RCRA) groundwater monitoring of the Area 317 to the OU-7 groundwater study and monitoring. DTSC provided a response letter on October 31, 2006 and requested that a closure report be prepared and submitted to provide the status of the closure activities identified in the closure plan for the Area 317 RCRA unit. Geomatrix participated in a conference call with the DTSC Site Mitigation and the Permitting Units to clarify specific items of the October 31, 2006, letter. Based on DTSC request and the discussions during the conference call, the closure report and a letter of response to DTSC comments were prepared and submitted to DTSC on April 30, 2007.

Environ has prepared the scope and the frequency of the monitoring activities to focus the RCRA groundwater monitoring to those areas that will provide meaningful results. The document has been provided to AIG for their review to ensure adequate funding.

Meanwhile, monitoring of the groundwater under the Area 317 continues on schedule.

Anticipated Activities for This Month

The current RCRA groundwater monitoring program will continue per the current plan until further agreements and arrangements are made.

Long-Term Actions

Provide recommendation for modification of the current RCRA monitoring program, and continue the closure activities.



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REMEDIAL ACTION PLAN

Activities for This Report Period

The final site-wide feasibility study (FS) for soil was submitted to DTSC on October 15. DTSC requested that the draft site-wide Remedial Action Plan (RAP) for OU2 through OU6 be prepared and submitted. The submittal date for the draft site-wide RAP was set for January 15, 2008. During the December 14, 2007 joint meeting of representatives of the Department of Toxic Substances Control (DTSC), City of Santa Clarita (City), SunCal Santa Clarita LLC (SSC), American International Specialty Lines Insurance Company (AISLIC), and Whittaker; SSC representatives presented an outline of the approach to integrate the shallow soil treatment and treated soil disposition programs with the site grading and land use plans to avoid potential "piecemealing" issues under the California Environmental Quality Act (CEQA). In addition, representatives of the parties discussed strategies to accelerate planning for groundwater containment and remediation and other remedies (e.g., soil vapor extraction, depleted uranium removal, and sweeps for potential munitions and explosives of concern [MEC]) through series of accelerated pilot studies. It was realized that the deadline for submittal of the RAP needed to be extended to enable further discussions and work as necessary regarding integration of soil and groundwater and integration of site soils with grading activities for future development and compliance with all applicable CEQA requirements.

Anticipated Activities for This Month

As discussed during the December 14, 2007 meeting with DTSC and City of Santa Clarita, a request for deadline extension for sit-wide RAP will be submitted.

Long-Term Actions

Work with DTSC to set a new deadline for submittal of the site-wide RAP. Prepare and submit work plans for pilot studies.

REMOVAL ACTIONS AND INTERIM REMEDIAL MEASURES

Activities for this Report Period

A Work Plan for Supplemental Characterization and Bench Top Testing of Proposed Method for depleted uranium (DU) removal at Areas 57 and 14 of the Whittaker-Bermite site was prepared



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by EnergySolutions and submitted to DTSC and the Radiological Health Branch of the California Department of Public Health (DPH) on December 10, 2007.

Submittal was made to the CA Department of Public Health (CDPH), Radiologic Health Branch requesting reciprocal recognition of the EnergySolutions mobile radioactive materials license issued by the U.S. Nuclear Regulatory Commission (NRC) to perform work in California for the 2008 calendar year. A request for additional information was received in December 2007.

Anticipated Activities for this Month

Address and incorporate any comments on the Draft Work Plan provided by DTSC and CDPH and submit the final version of or an addendum to the Work Plan, if necessary. All comments received from these agencies will be reviewed and addressed.

Long Term Actions

After the Work Plan has been accepted, field work will be scheduled. Results of the field work will support the dose modeling effort.

OUI REMEDIATION

Activities for This Report Period (1)

Operated soil vapor extraction (SVE) systems at Area 43. The hi-vacuum system is currently at the Building 329 area, but is not being operated until a site-specific permit is obtained from the South Coast Air Quality Management District (SCAQMD). The hi-vacuum system was previously operated under a various locations permit that expired.

Anticipated Activities for This Month

Continue operation and optimization of SVE system in Area 43 and restart the Building 329 operations upon receipt of the site-specific permit.



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Long-Term Actions

Two SVE systems will be operated at Area 43 and Building 329 concurrently until halogenated volatile organic compound levels are eliminated or reduced to appropriate levels or asymptotic levels are reached.

Activities for This Report Period (2)

Approximately 3,588 cubic yards of soil were excavated from Area 55 during this reporting period. Excavation operations were limited due to weather conditions, shutdown of the operation during the holidays, and limited space on the treatment pad resulting from the slowdown in the bioremediation process during the winter.

Full-scale enhanced biological treatment of impacted soils continued during this reporting period using a combination of glycerin, di-ammonium phosphate, and bioaugmentation culture (0.01% when available). During this reporting period, approximately 2,280 tons of soil was processed and placed into treatment cells (4). Sampling results have generally shown consistent and successful reduction of perchlorate to non-detectable levels, although the incubation time has increased from approximately 2 weeks or less to 4 to 6 weeks, due to colder ambient air temperatures and higher baseline perchlorate concentrations. A total of one Ag Bag and 9 treatment cells were approved as "clean" by DTSC during this reporting period and the treated soil was transported to clean soil stockpile areas for later use as backfill material.

Dust monitoring indicated that, in general, the net dust readings at the downwind monitoring stations were below 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) during the soil excavation and processing operations. In the few cases when the dust readings exceeded $50 \mu\text{g}/\text{m}^3$, the dust was suppressed with water; therefore, the exceedances were insignificant.

Anticipated Activities for This Month

Continue full-scale operations.

Long-Term Actions

Continue soil remediation operations in accordance with the OU1 RAP/Remedial Design.



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SECTION III – GROUNDWATER AND SURFACE WATER ISSUES

Specific actions taken on behalf of the respondent, action expected to be undertaken and planned activities for groundwater and surface water issues are summarized in the following sections:

REMEDIAL INVESTIGATIONS AND GROUNDWATER/SURFACE WATER MONITORING AND INTERIM ACTIONS

Activities for This Report Period (1)

The updated groundwater (OU-7) RI was submitted in February 2007 for DTSC review and comment. Section 7, Risk Evaluation of Groundwater and Surface Water, was revised to address comments received from DTSC, and the Response to Comments was completed. The responses and revised Section 7 were sent to the DTSC on November 16, 2007 for final review and approval. DTSC issued a letter dated December 10, 2007 approving the OU-7 RI Report, including Section 7.

Anticipated Activities for This Month

Complete the distribution of the final Section 7 and Response to Comments.

Long-Term Actions

Groundwater monitoring and sampling data will be used in developing the OU-7 FS.

Activities for This Report Period (2)

A Pilot Remediation Pumping Program was started in Northern Alluvium Areas 11, 67, and 75, in 2006. As a part of expanded pumping program, an alternate extraction well 75-MW-35 for higher groundwater extraction and observation well clusters were completed in January 2007. Well 75-MW-35 and the six hot spot wells were connected to the new higher capacity groundwater treatment system. The low flow wells were brought online during the week of June 11, 2007. System shake-down and performance startup testing began on June 18, 2007, and continued through early October. Sustained pumping of the extraction well 75-MW-35 began in mid-October and continued during December. In late December, the wells were shut down for treatment system maintenance.



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Monitoring of the aquifer response to pumping from the alternate extraction well 75-MW-35 was conducted during December following the start up of sustained pumping of the extraction well and completion of the system shake-down and startup testing of the new treatment system.

Anticipated Activities for This Month

Monitoring of the aquifer response to pumping from the alternate extraction well 75-MW-35 and the downgradient site boundary low flow extraction wells will continue during January after the wells are restarted.

Long-Term Actions

Continue operating the extraction and treatment system and conduct additional performance monitoring.

Activities for This Report Period (3)

Potential remedial technologies to address Northern Alluvium groundwater hot spots, including evaluation of the Area 75 boundary containment established by sustained operation of the low flow pumping wells that started in early October, are being evaluated as part of the OU-7 FS.

Anticipated Activities for This Month

Work on the draft OU-7 FS will continue during this month.

Long-Term Actions

Additional source control measures in Northern Alluvium will be considered and recommended where determined to be necessary.

Activities for This Report Period (4)

The Quarterly Groundwater Monitoring Report, Second Quarter 2007 was submitted to DTSC on December 11, 2007.

Anticipated Activities for This Month

The Quarterly Groundwater Monitoring Report, Third Quarter 2007 was submitted to DTSC on January 10, 2008. Data review and reporting for the Fourth Quarter 2007 quarterly monitoring



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conducted in November is in progress. In addition, a proposed plan to refine and focus the groundwater monitoring program is being developed based on the extensive body of groundwater monitoring data that has been collected at the Site since 2003. The draft plan is currently being reviewed by AIG and their consultants.

Long-Term Actions

Continue monitoring and reporting of the proposed network of monitoring wells on quarterly schedule.

NORTHERN ALLUVIUM GROUNDWATER TREATMENT SYSTEM CONSTRUCTION (OU5)

Activities for This Report Period

The December compliance samples were collected on December 3, 2007 and results indicated an exceedance of copper over the monthly average compliance limit and the daily maximum limit for nitrogen. The system was placed in recycle mode after the samples analyses were received. The media in the lag nitrate vessel was replaced on December 13, 2007 and the filter media of the lead vessel was replaced on December 18, 2007. Weekly samples for nitrate compliance were collected on December 17, 24, and 31, results of which indicated that the water treatment plant was operating within the permit limits. Additionally, a process sample collected on December 31, 2007 brought the monthly average for copper below the permit limit.

In addition to the downtime while waiting for the nitrate media to be replaced, the overnight freezing temperatures kept the system from operating in normal mode for most of December, with a few exceptions when weekly samples were collected and rainwater was processed. As of December 3, 2007 we have treated and discharged 2,509,803 gallons of impacted water from Northern Alluvium. During December we treated and discharged 20,027 gallons of storm water collected from various areas of the site.

CDM sent a written request to RWQCB on 12/11/07 for using the clean discharge water for dust control purposes.

Anticipated Activities for This Month

Bag filters are expected to be removed from the site in January.



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Monthly sampling is anticipated to occur on January 8, 2008. The GAC vessel that was sent for processing in November is expected to be put into service in January; also, the media in the metals resin vessels is expected to be replaced.

CDM will follow up with RWQCB on the status of the 12/11/07 request for using the clean discharge water for dust control purposes.

FEASIBILITY STUDIES, INTERIM REMEDIAL MEASURES, STORM WATER POLLUTION PREVENTION (SWPP)

Activities for This Report Period (1)

Work on the draft OU-7 FS is in progress.

Anticipated Activities for This Month

The refined site conceptual model will be incorporated into the OU-7 FS. Work on the draft OU-7 FS will continue during this month.

Long-Term Actions

Submit the OU-7 FS to DTSC.

Activities for This Report Period (2)

Pursuant to the Site Storm Water Pollution Prevention Plan, Environ continued coordinating the implementation of short-term surface water run-off mitigation measures. Implementation of the short-term mitigation measures is being coordinated with CDM, particularly in the areas of the site where soil remediation activities are in progress.

Anticipated Activities for This Month

Upgrades to the short-term mitigation measures will continue as necessary.

Long-Term Actions

Long-term mitigation of the drainages and excavations will be conducted in conjunction with the soil remediation.



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REMEDIAL ACTION PLAN

Activities for This Report Period

No activity at this time, other than those outlined above for OU1 remediation.

SECTION IV – REQUIREMENTS UNDER THE ORDER THAT WERE NOT COMPLETED

All requirements of the Order were completed. Whittaker has met or exceeded all the substantive requirements of the Order.

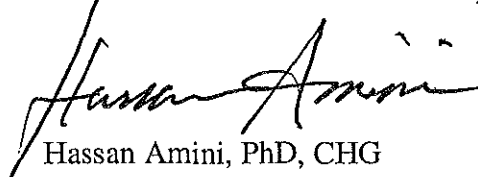
SECTION V – PROBLEMS OR ANTICIPATED PROBLEMS IN COMPLYING WITH THE ORDER

Following DTSC's agreement with Whittaker's proposed modifications to implementation plans in compliance with the Order reflected in the letter dated September 28, 2004, DTSC's letter dated July 11, 2005, included a schedule for submitting a number of documents. All deadlines have been met and documents have been submitted per requested schedule.

SECTION VI – RESULTS OF SAMPLE ANALYSIS, TESTS, AND OTHER DATA

Whittaker has instructed its contractors to continue to provide DTSC staff with raw data sets for ongoing quarterly groundwater monitoring events and RI/FS work upon receipt from the lab.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.



Hassan Amini, PhD, CHG
Project Coordinator



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cc: Eric Lardiere, Whittaker Corp; William Weaver, CDM; Jessica Donovan, ENVIRON; Paul Bergstrom, Knight Piésold; Jeremy Duncan, EODT; Tim Bricker, Santa Clarita L.L.C.; Myla Bobrow, RFI Corporate Offices; Megan Trend, Chubb Financial Solutions; Cindy Hunter and Stacy Parker, AIG Insurance; Vitthal Hosangadi, MACTEC; Jim Strandberg, Malcom Pirnie; John Carty, Zurich North America; Hal Dash, Cerrell Associates; Lisa Hardy and Jeff Hogan, City of Santa Clarita; Yueh Chuang, CH2M Hill; Kathy Stryker Anderson, US Army Corps of Engineers; Robert DiPrimio, Valencia Water Company; Lynn Takaichi, and Meredith Durant, Kennedy Jenks; David Bacharowski, RWQCB; James Leserman, Castaic Lake Water Agency; Steve Cole, Newhall County Water District; Neil Elsey, Avion Holdings LLC; Mauricio Guardado, Santa Clarita Water; Scott Andrews and Doug Mosteller, Cherokee Investment Services, Inc.; Jeff O'Keefe, Department of Public Health.