



California Regional Water Quality Control Board Central Coast Region



Alan C. Lloyd, Ph.D.
Agency Secretary

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Arnold Schwarzenegger
Governor

October 12, 2005

Mr. Eric G. Lardiere, Vice-President
General Counsel and Secretary
Whittaker Corporation
1955 N. Surveyor Avenue
Simi Valley, CA 93063-3386

Dear Mr. Lardiere:

WHITTAKER ORDNANCE FACILITY, HOLLISTER, SAN BENITO COUNTY; REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN RESPONSE

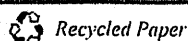
Central Coast Regional Water Quality Control Board (Water Board) staff reviewed your May 27, 2005 *Remedial Design/Remedial Action Work Plan* (Work Plan). The Work Plan was presented by Geomatrix Consultants as an addendum to the March 14, 2003 *Corrective Action Plan*. The Work Plan described a remedial approach to contaminated groundwater and soil at the Whittaker Ordnance Facility (Site) in Hollister. This letter outlines the next steps we anticipate in the cleanup process and provides our conceptual approval. We will provide a detailed Work Plan comment letter, as outlined below.

We acknowledge you have done a great deal of review and assessment of on-site soil and groundwater treatment options. Work Plan Appendix B, "Remedial Alternatives Analysis," characterized the Site as consisting of six soil and eight groundwater zones and presented a simplified groundwater model. Remedial alternatives were analyzed by your consultants for each zone. Capping the key source areas was the proposed soil remedial alternative and a groundwater extraction and treatment system (System) was the proposed groundwater remedial alternative. As proposed by your consultants, extracted groundwater will be treated via granular activated carbon for volatile organic compounds removal and either ion exchange or a bioreactor for perchlorate remediation. You plan to discharge treated water to the San Benito River (approximately 2000 feet north of the Site boundary) in compliance with an NPDES permit.

Water Board staff met with Whittaker's consultants Geomatrix, Arcadis, and RRM on June 16, 2005. Staff agreed with the general proposed approach to construct a groundwater extraction and treatment system. Since the meeting, Whittaker has moved forward with System design.

As we understand, the proposed System is designed to mitigate the risk to off-site receptors through containment and to provide long-term groundwater containment and treatment. We conditionally approve the System described, but we will provide additional specific comments and questions in a letter to follow. We request you respond to the forthcoming comments before proceeding with further System design and implementation. We do not approve the System as the final remedy for Site cleanup at this time. Once additional investigations are conducted, and an extensive performance-monitoring system is developed and evaluated, we can consider final treatment strategy approval.

California Environmental Protection Agency



**Item No. 14 Attachment No. 2
December 1-2, 2005 Meeting
Perchlorate Cleanup Sites**

Our ultimate goal is cleanup of groundwater to background conditions. However, we understand there are many complicating factors, including the Site's hydrologic and geologic characteristics; the large, diffuse, and commingled plumes; and contaminant characteristics, which complicate the cleanup. We understand any system may have to run in perpetuity, but we must require mitigation of the threat to groundwater where it is economically and technologically feasible to do so.

The Site-specific cleanup process we envision is included below. We have provided the outline so both Whittaker and Water Board staff have a clear understanding of what is required before we can approve a final cleanup plan. The action items and dates may change as additional information is gathered. The dates are not required deadlines; however, we will issue a revised cleanup or abatement order with final requirements and dates.

1. **Complete Work Plan Comments.** Date: **October 21, 2005**
Water Board staff will complete and provide detailed Work Plan comments.
2. **Response to September 23, 2005 Letter.** Date: **October 31, 2005**
Water Board staff will provide comments to Arcadis' *Proposed Groundwater Treatment System Discharge Standards* letter.
3. **Work Plan Meeting.** Date: **November 1, 2005** proposed
Water Board staff and Whittaker's consultants (Geomatrix, Arcadis and others) will meet to discuss the Work Plan comments.
4. **Response to Work Plan Comments.** Date: **December 1, 2005**
Whittaker will provide a formal response to Water Board comments.
5. **Public Notification Draft.** Date: **December 1, 2005**
Whittaker will submit a public notification draft fact sheet to staff for review. We will provide detailed comments in our Work Plan comments letter regarding requirements.
6. **NPDES permit.** Date: to be determined
Whittaker will submit the final NPDES permit application for the System.
7. **Update to Regional Water Board.** Date: **December 2, 2005**
Water Board staff will provide an update to the Regional Water Board at the December 2, 2005 Board Meeting. We will answer any questions Board members may have. Although Water Board approval is not required for site cleanup, we may request concurrence due to the Site's nature, complexity, and long-term duration.
8. **Public Notification Review.** Date: **December 16, 2005**
Water Board staff will complete review of the fact sheet and request you distribute the fact sheet to appropriate residences/parties. The public will have 30 days to provide comment on the cleanup plan.

9. Public Notification.**Date: 30 days following distribution**

Thirty days following distribution of the fact sheet, Whittaker will collect and respond to public inquiries. You may be required to hold a public meeting, if requested, or make report and work plans. Water Board staff will participate in the public meeting process.

10. Complete Additional Investigations.**Date: First Quarter 2006**

Whittaker will submit a supplemental report that will include additional site investigation findings and conclusions. In our Work Plan comment letter, we will require you conduct the additional investigations that were outlined in the Work Plan. Your supplemental report shall propose whether you have to conduct remedial measures for contaminated soil and groundwater, based on the additional investigations. If you conclude remedial measures are warranted, you will propose a remedial option.

11. Monitoring and Performance Plan.**Date: Third Quarter 2006**

Whittaker will submit a detailed monitoring and performance plan for off-site monitored natural attenuation and System performance. The performance plan shall detail how you will assess the Site model. You must provide details on how you will confirm impacted groundwater is contained on the site. The performance plan shall include capture zones, quality of groundwater around the site, and additional information, which will be included in our Work Plan comment letter. The performance plan should be adequate to determine if the System is meeting the objective to mitigate the risk to off-site receptors and to contain, treat, and dispose of groundwater.

12. Approve and Direct Cleanup.**Date: Fourth Quarter 2006**

Water Board will develop a revised cleanup or abatement order.

13. Remedial Design/Remedial Action Report.**Date: 18 months from system start up**

Whittaker will provide a Remedial Design/Remedial Action Report that evaluates the System's performance satisfying the overall groundwater cleanup objective. The report will serve as an update to the Work Plan and will conclude if the System is the final cleanup strategy or if additional cleanup is warranted.

If you conclude the System is capable of Site-wide groundwater cleanup, you must submit a long-term monitoring plan. If capping is still the proposed soil remedial alternative, you must also submit a long-term monitoring plan. We will require extensive monitoring to confirm there is no lateral or vertical migration of contaminants. The proposed long-term monitoring plan must meet the monitoring criteria described in Title 27, landfill regulations. Pursuant to State Water Resources Control Board Resolution No. 92-49, "if cleanup and abatement involves actions other than removal of the waste, such as containment of waste in soil or groundwater...the Water Board shall apply the applicable provisions of Chapter 15 (now Title 27), to the extent that it is technologically and economically feasible to do so."

14. Final Design Approval by staff.**Date: 60 days following submittal**

Water Board staff will review and provide comments regarding the Remedial Design/Remedial Action Report. We intend this to be the final cleanup decision point.

In conclusion, we will provide detailed comments to the Work Plan shortly. We will evaluate the System for its function to contain off-site migrating groundwaters and reduce the risk to off-site receptors. A performance-monitoring plan will determine if the System is successful at groundwater containment and extraction. A year of groundwater monitoring data will be compiled and evaluated in the Final Remedial Design/Remedial Action Report. In the report you must evaluate the System's effectiveness to contain and treat groundwater and determine if the System is suitable as the final remedy for groundwater cleanup. Once you propose the System's final groundwater cleanup remedy, you must also propose an extensive long-term monitoring plan. We are committed to working with you and your consultants to stop contaminant migration and implement active cleanup.

Please do not hesitate to call Kristina Seley at (805) 549-3121 or Eric Gobler at (805) 549-3467 should you have any questions.

Sincerely,



Roger W. Briggs
Executive Officer

cc: Whittaker Interested Parties List

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