

ATTACHMENT NO. FOUR
REVIEW OF MONITORING PROGRAM WORKPLAN

California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair



Linda S. Adams
Secretary for
Environmental
Protection

Fresno Branch Office
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22 June 2006

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FRESNO COUNTY
DEPT. OF
PUBLIC WORKS & PLANNING

Ms. Marion Miller, Resources Manager
Fresno County Department of Planning and
Resources Management
2220 Tulare Street, 6th Floor
Fresno, CA 93721

**REVIEW OF MONITORING PROGRAM WORKPLAN, AMERICAN AVENUE LANDFILL,
FRESNO COUNTY**

We have reviewed your Report entitled *Evaluation Monitoring Program (EMP) Workplan, American Avenue Disposal Site*, submitted pursuant to Evaluation Monitoring Specification No. F.2 and Provision G.13.c.1) of Waste Discharge Requirements, Order No. R5-2005-0067 (WDRs). The enclosed staff memorandum provides detailed comments pertaining to our review of the Report.

The information submitted appears adequate. This letter serves as approval of the work plan to complete an Evaluation Monitoring Program that meets the provisions of §20425(b) of Title 27 and the WDRs. You may proceed with the work plan as proposed. We anticipate your submission of a report that describes all actions and monitoring taken to complete the Evaluation Monitoring Program by 1 October 2006, pursuant to Evaluation Monitoring Specification Nos. F.3 and Provision G.13.c.2) of the WDRs.

If you have any questions, please call Dale Essary at (559) 445-5093.

DANE S. JOHNSON
Senior Engineering Geologist
PG No. 4239

cc: Ms. Virginia Rosales, California Integrated Waste Management Board, Sacramento
Ms. Amanda Salazar, Fresno County Environmental Health Division, Fresno
Mr. Francis Coward, Fresno County Department of Planning and Resources
Management, Fresno





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TO: DANE S. JOHNSON
Senior Engineering Geologist

FROM: DALE E. ESSARY
Water Resource Control Engineer
RCE No. 53216

DATE: 22 June 2006

SIGNATURE: 

SUBJECT: **EVALUATION MONITORING PROGRAM WORKPLAN, AMERICAN AVENUE
LANDFILL, FRESNO COUNTY**

BACKGROUND

The County of Fresno owns, and the Fresno County Department of Public Works and Development Services (County) operates, the American Avenue Landfill, approximately five miles southeast of the City of Kerman. The 440-acre waste management site is regulated by Waste Discharge Requirements Order No. R5-2005-0067 (WDRs). The facility currently consists of an inactive unlined waste management unit covering 30 acres (Phase I), a 160-acre composite-lined waste management unit (Phase II), and a proposed 250-acre composite-lined expansion waste management unit (Phase III). To date, a 16-acre module (Module 1) of the Phase III unit liner system has been constructed.

Volatile organic compounds were first detected in groundwater when the detection monitoring wells were installed in 1987, and continue to be detected sporadically in the detection monitoring wells at concentrations below primary water quality standards. In addition, inorganic naturally-occurring waste constituents have been detected in downgradient monitoring wells at concentrations in excess of tolerance limits established for the landfill. The County is currently conducting evaluation monitoring. However, the final evaluation monitoring report has not been submitted to date, as the lateral and vertical extent of groundwater degradation has not been determined. The WDRs require timely completion of the evaluation monitoring program and implementation of a feasibility study for corrective action. Specifically, Evaluation Monitoring Specification No. F.2 and Provision G.13.c.1) of the WDRs require the County to submit a work plan for completing an Evaluation Monitoring Program that meets the provisions of §20425(b) of Title 27 and the WDRs, by 1 February 2006.

CURRENT SUBMISSION

We received a letter report entitled *Evaluation Monitoring Program (EMP) Workplan, American Avenue Disposal Site* (Report), dated 1 February 2006, prepared by the County in response to

our 4 March 2005 letter. The Report provides a proposed workplan for the completion of the EMP. Comments below pertain to my review of the Report.

Information Provided

The Report indicates that existing data demonstrates the existing groundwater well monitoring network at the site is adequate to define the extent of groundwater degradation. Because the newer wells installed in 2005 have only been sampled twice, the Report proposes to complete the EMP by continued quarterly sampling of the six new wells (DMW-21 through DMW-25 and BMW-3) for the 5-year list of constituents of concern, pursuant to Monitoring and Reporting Program No. R5-2005-0067 (MRP). Semi-annual sampling of the existing detection monitoring network will also be continued through the third quarter of 2006, at which time an analysis of the data from all wells for the prior year will be performed and a report generated addressing whether statistical evidence for inorganic constituents is the result of a release from the landfill or is due to natural variation in the groundwater quality. The extent of possible organic waste constituents in groundwater will also be assessed. The report, which is to be submitted on or before 1 October 2006, will also address whether any additional subsurface investigative work is warranted.

Comments

Evaluation Monitoring Specification No. F.3 and Provision G.13.c.2) of the WDRs require the County to complete an Evaluation Monitoring Program (EMP) to the satisfaction of the Executive Officer and that meets the provisions of §20425(b) of Title 27, and to submit a report that describes all actions and monitoring taken to complete the EMP, by 1 October 2006. Evaluation Monitoring Specification No. F.5 provides the minimum documentation that is needed to complete the EMP, which includes an analysis of all the information gathered to determine the lateral and vertical extent of each waste constituent released from the Unit (organic and inorganic), including a determination of the spatial distribution and concentration of each constituent of concern throughout the zone affected by the release.

To date, the vertical extent of the VOC plume has not been delineated at the subject facility. In addition, the lateral and vertical extent of inorganic degradation has yet to be determined. It is therefore appropriate that further evaluation of the nature and extent of groundwater degradation be implemented. The scope of additional work proposed in the Report may serve to fulfill the requirements of Evaluation Monitoring Specification No. F.5 of the WDRs. However, any additional subsurface investigative work deemed necessary to complete the EMP will need to be completed and the results submitted by 1 October 2006, pursuant to Evaluation Monitoring Specification No. F.3 and Provision G.13.c.2) of the WDRs.