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February 7, 2007

Mr. Michael Mercereau
Director of Public Works
City of San Marcos
201 Mata Way
San Marcos, CA 92069-29549

In Reply Refer to:
LDU:06-0022.02:agrove

Dear Mr. Mercereau:

SUBJECT: EVALUATION MONITORING PROGRAM WORKPLAN, SAN MARCOS LANDFILL 1 (BRADLEY PARK/OLD LINDA VISTA LANDFILL)

On November 3, 2006 the California Regional Water Quality Control Board, San Diego Region (Regional Board) received the above-referenced report from the City of San Marcos (the Discharger). The work plan was submitted to comply with directives of Investigative Order No. R9-2006-0044, issued to the Discharger on April 17, 2006. The Regional Board has determined that the **proposed work plan is incomplete at this time** and has the following comments regarding the submitted work plan:

1. The work plan states that soil borings and trenching will be used to assist in determining the extent of waste at the landfill. Although locations of some soil vapor probes and piezometers are indicated on Figure 3, the proposed locations of the borings and trenches to delineate the extent of solid wastes were not included in the work plan. Although the workplan states that "..., invasive trenching is planned to determine limits of solid wastes in the drainage ditch", neither the location(s) or extent of the trench(es) are described or illustrated in the workplan. As a result, it is unclear as to how long and how deep the proposed trenches will be, where the trenches are to be located, and/or what other requirements may be necessary to comply with requirements of dredging/fill permits (Clean Water Act sections 401 and 404). There workplan does not describe:

   a. Where the excavated materials will be stored and how they will be managed during the completion of field activities. Although the landfill reportedly received only non-hazardous wastes, burning of refuse occurred within the boundaries of the landfill.
   b. How excavated wastes will be managed and disposed of upon completion of trenching activities, or
   c. How the Discharger intends to prevent the open trenches from being a public nuisance.

The materials/wastes excavated during trenching activities may not be appropriate to use for backfilling the exploratory trenches upon completion of investigative activities. All wastes, including soils, debris and burn-ash encountered during the investigation must be managed in accordance with the applicable requirements set for in the California Code of Regulations (CCR) Title 23 and/or Title 27.

The proposed use of trenching as an investigative tool in a public park indicates that the Discharger should contact the San Diego County Department of Environmental Health, Local Enforcement Agency to determine additional requirements that may be necessary to ensure protection of public health and safety, and contact the Air Pollution Control District for all necessary permits and waivers as necessary. The Discharger should also contact the Regional Board's Central Watershed Unit (Supervisor Ms. Chiara Clemente at TEL: 858-467-2359) to discuss issues that may arise relative to alteration of the drainage channel due to trenching, and implementation of appropriate storm water best management practices (BMPs) as needed during investigative activities.

2. The work plan describes the placement of two new ground water monitoring wells (referred to as SM-7 & SM-8) as proposed in the "Landfill Evaluation Program Work Plan and Preliminary Site Conceptual Model" submitted by the County of San Diego in August 2004. Please clarify if the two proposed monitoring wells are labeled SM-8 and SM-9. This change should be noted in the revised work plan.

   The work plan and 2004 report propose the collection of ground water data using direct push borings. While the Regional Board recognizes that the direct-push methodology has been used successfully at other sites for collecting ground water data, we cannot determine if the number of proposed hydro-punch locations will be sufficient in determining the extent of ground water contamination at the site. The usefulness of monitoring wells at proposed locations of SM-8 and SM-9 are difficult to assess until ground water data have been collected both upgradient and down-gradient from the landfill, and the lateral extent of ground water contamination determined. CCR Title 27 §20415(b)(1)(C)(1-3) requires that the Discharger design a monitoring well network and program with the appropriate number of background and downgradient monitoring wells to yield ground water samples that represent the quality of ground water not affected by a release from the landfill, as well as locations which provide the data necessary to assess changes in water quality due to a release from the unit. The Discharger should consider that the installation of additional ground water monitoring wells may be necessary to delineate the release, and it may be advantageous for the Discharger to develop a contingency plan should the need arise to expand the monitoring well network.

The work plan does not identify which constituents will be analyzed to assess the extent of ground water contamination at the site. In accordance with Order R9-2006-0044, and CCR Title 27, §20395, the discharger shall propose a constituents of concern (COC) list that includes waste constituents, reactions products and hazardous constituents that are reasonably expected to be present in wastes contained at the landfill. Order R9-2006-0044 (Directive E.4) requires the Discharger to include all constituents listed in Appendix II to Code of Federal Regulations (CFR), Title 40, Part 258. Upon completion of ground water sampling and analysis, the current constituents of concern (COC) list should be updated to incorporate any new constituents which may be present in ground water at the site.

The work plan includes a description of analytical methods for soil samples (on page 27). Please revise the text of the workplan erroneously indicates that EPA Method "8280" provides analytical results for SVOCs so this reference needs to be revised in the text. However, the work plan does not clearly specify that the proposed analytical methods for groundwater samples are to be conducted accordance with Investigative Order R9-2006-0044, which clearly requires analysis of all constituents listed in Appendix II to the Code of Federal Regulations (Directive E.3). In addition, the text does not appear to contain a proposal for how the proposed work plan will ensure compliance with monitoring parameter analysis as required by Directive B.1(3) and CCR Title 27 §20415(e)(7). This information should be included in a revised workplan.

3. The work plan indicates that water level measurements will be obtained at monthly intervals during the "winter months", within the drainage ditch to assess the relationship between the drainage ditch and ground water flow. The discharger should propose an alternative to this method of analysis and develop a contingency plan in case the area does not receive enough rainfall to complete the analysis as proposed.

4. The work plan indicates that an analysis of the irrigation system at the park will be conducted to ensure it is operating appropriately. However, the work plan does not provide the Regional Board with a description of how this analysis will occur and whether or not the method of analysis will have an impact on the landfill cover or overall erosion and drainage controls at the site. This information should be provided in a revised work plan.

5. The work plan states that a soil vapor survey will be conducted, and the sampling probe utilized in that analysis will be used to collect continuous core samples of the landfill cover to determine its thickness, integrity and soil properties. The work plan does not provide information relating to the materials and methods that will be used to backfill the boreholes.

6. The initial site conceptual model (CSM) is needed in order to assess where data gaps may exists, and to assist the Discharger in determining what additional work will be needed to ensure that the site is fully delineated. It is not appropriate for the Discharger to simply use the CSM developed by the County in 2004, since significant information pertaining to surface water discharges of waste constituents from the Park's subdrain system (see NOV R9-2005-0046) and exposed waste (see NOV R9-2005-0172) is available at this time. To comply with Investigative Order R9-2006-0044 [see Directive B.1.(7)], the site conceptual model in the proposed work plan should have revised the County's 2004 SCM with new existing information. This information must be provided in a revised work plan.

7. The work plan calls for the revision of the detection monitoring system at the Bradley Park Landfill. Because of the presence of waste constituents in ground water and surface water discharges, Investigative Order R9-2006-0044 requires the Discharger to propose an Evaluation Monitoring Program (EMP) in accordance with CCR Title 27 §20385 and §20425. The purpose of these requirements for the Discharger to propose an EMP that will meet the existing regulatory requirements and eventually implement corrective actions that will restore water quality at the Landfill.

8. The work plan contains a description of tasks that the Discharger anticipates including as part of their Public Participation Plan. The Regional Board encourages the Discharger to consult with the County Local Enforcement Agency (LEA Supervisor Ms. Rebecca Lafreniere at 858-694-2232 or Rebecca.lafreniere@sdcounty.ca.gov) about their recent staff experiences implementing Public Participation under similar circumstances at the Poway Landfill

9. The schedule provided in the work plan needs clarification. The center column of the table provided in Section 6.0 (Page 33) outlines "Completion Dates, (months from start)" but does not specify an actual start date. Clarification of the proposed schedule is needed.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions concerning this letter, please contact Mrs. Amy Grove at (858) 637-7136 or via e-mail at agrove@waterboards.ca.gov.

Sincerely,

JOHN R. ODERMATT, Senior Engineering Geologist
Land Discharge Unit

cc: Ms. Rebecca Lafreniere, County of San Diego, Local Enforcement Agency, 9325 Hazard Way, San Diego, CA 92123

Mr. Barry Pulver, County of San Diego, Department of Public Works, 5201 Ruffin Road, Suite D, San Diego, CA 92123

Mr. Gary Hartness, Air Pollution Control District, 10124 Old Grove Road, San Diego, California 92131

Ms. Chiara Clemete, Central Watershed Unit, San Diego Regional Water Quality Control Board