

MEMORANDUM

TO: Glenn Morelli/Sonoma County
FROM: Richard Mitchell/RMC Geoscience
SUBJECT: Point of Compliance
DATE: May 20, 2004

Following our discussion yesterday morning, I understand the Regional Water Quality Control Board (RWQCB) may require that the landfill underdrain be considered the Point of Compliance (POC) for the purposes of landfill monitoring. As requested, this memorandum summarizes several points that, in my opinion, should be considered and/or reconciled regarding this potential requirement.

1. California Code of Regulations (CCR) Title 27, Article 27, §20164 defines the point of compliance as:

"Point of Compliance" (SWRCB) (as capitalized) means a vertical surface located at the hydraulically downgradient limit of a waste management unit (Unit) and that extends through the uppermost aquifer underlying the Unit.

The underdrain does not meet this definition because: (1) it is a horizontal surface; (2) it is not located at the hydraulically downgradient limit of the Unit; and (3) it does not extend through the uppermost aquifer underlying the Unit.

2. The underdrain will not meet the requirements of §20415(B) that states:

For DMP-for a detection monitoring program under §20420: 1. a sufficient number of Monitoring Points (as defined in §20164) installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer that represent the quality of ground water passing the Point of Compliance and to allow for the detection of a release from the Unit.

This is because samples from the underdrain will represent groundwater flowing up and into the drain and not groundwater passing the downgradient limit of a Unit.

3. The underdrain is located directly below and within the limits of waste placement. Although not directly applicable, the California Department of Toxic Substances Control (DTSC) recently completed a Comprehensive Monitoring Evaluation (CME) for a closed hazardous waste facility in Northern California. The final report for the CME has not been issued to date. However, DTSC staff have notified the landfill owner that existing monitoring wells located within the landfill footprint and screened at the base of the Unit and 10 feet into the underlying geologic materials

could no longer be used as monitoring points because the well locations did not meet the requirements for the POC.

In my opinion, the underdrain represents an important monitoring point or points for the landfill.¹ In particular, the underdrain can act as an effective leak detection system and, if necessary, could be incorporated into a corrective action program. However, the underdrain does not meet any of the statutory requirements for the POC and provides no information regarding possible migration of contaminants to the geologic units below the landfill or beyond the lateral limits of the landfill.

¹Specifying the underdrain as a monitoring point would be consistent with CCR Title 27 §20405 that states:
(a) For each Unit, the RWQCB shall specify in the WDRs the Point of Compliance at which the Water Standard (of §20390) applies. The Point of Compliance is a vertical surface located at the hydraulically downgradient limit of the Unit that extends through the uppermost aquifer underlying the Unit. For each Unit, the RWQCB shall specify Monitoring Points (as defined in §20164) along the Point of Compliance, *and shall specify additional Monitoring Points at locations determined pursuant to §20415(b-d) at which the Water Standard under §20390 applies and at which monitoring shall be conducted.*