

California Regional Water Quality Control Board  
North Coast Region

ORDER NO. R1-2010-0041  
RESCISSION OF ORDER NO. R1-2009-0025  
REQUIRING TECHNICAL INFORMATION  
PURSUANT TO WATER CODE SECTION 13267(b)

FOR

HEWLETT PACKARD COMPANY  
Hewlett Packard Valley Site  
1201 Piner Road  
Santa Rosa  
Sonoma County

The purpose of this Order is to clarify certain findings of, and to rescind, Section 13267(b) Order No. R1-2009-0025. The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board) finds that:

1. On March 3, 2009, the Regional Water Board issued Order No. R1-2009-0025 (Order) requiring Hewlett Packard Company (HP) to submit certain technical reports, including a revised operations plan for the soil vapor extraction system (SVE) at the on-site building identified as Building 1T.
2. On March 30, 2009, HP filed a Petition for Reconsideration of Order No. R1-2009-0025 with the Regional Water Board and a Petition for Review and Request for Hearing with the State Water Resources Control Board. In subsequent correspondence with Regional Water Board staff, Hewlett Packard Company also submitted a letter dated May 29, 2009, summarizing its specific objections to Order No. R1-2009-0025. The May 29, 2009 letter is accessible for review at the link titled "HEWLETT PACKARD ASSESSMENT OF THE FACTUAL REPRESENTATIONS IN NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD ORDER NO. R1-2009-0025" on the GeoTracker database at the Internet URL:  
[https://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0609791161](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609791161)

After consideration of the objections set forth by HP, the Regional Water Board finds that the following corrections and clarifications of findings contained in the Order are necessary and appropriate:

- a. Finding #6 of the Order cited the California Department of Toxic Substances Control (DTSC) June 10, 2003 memorandum from DTSC's Hazardous Waste Management Program (HWMP) staff, which recommended that "the responsible party(s) be required to immediately submit corrective action alternatives to mitigate potential risks to the building occupants" due to potential vapor intrusion into the on-site building designated as "Building 1T".

However, Finding #6 did not also cite the subsequent DTSC recommendations that were based on additional data generated after the 2003 memo was written.

- In a subsequent memorandum dated July 11, 2005, DTSC's Human and Ecological Risk Division (HERD) toxicologists stated the following:

*“Given the monitoring data as it currently exists, the response to the identified low level of vapor intrusion, for risk assessment purposes, should therefore also be at a low level; perhaps periodic monitoring. ...HERD recommends that Region 1 recognize that air monitoring data indicate that there is sufficient evidence of low-level vapor intrusion present at the HP Valley site, and consider some low level of long-term monitoring at the Lattice School to further define the potential human exposure.”*

- In a memorandum dated August 2, 2005, DTSC's HWMP staff acknowledged HERD's July 11, 2005 risk assessment and provided comment. In the memorandum, DTSC acknowledged that HP had voluntarily installed an SVE system at Building 1T, and requested that RWQCB require HP, through some appropriate enforcement mechanism, to enhance the SVE system by adding additional vacuum points to mitigate the potential vapor intrusion into Building 1T. HP subsequently installed additional sub-slab vapor monitoring points at Building 1T and conducted additional evaluation of the existing single extraction-point SVE system. The assessment of the SVE system effectiveness was presented in a report dated July 21, 2006, that concluded no additional SVE vacuum wells were warranted.

- b. Finding #8 of the Order incorrectly stated:

*The reported SVE operational and analytical data show that between November 2006 and October 2007, when the SVE system was operated intermittently, soil gas beneath the Building 1T exceeded the California Human Health Screening Level for TCE more than half of the time.*

During this period, HP voluntarily operated the SVE system according to criteria set forth in the Soil Vapor Extraction System Operation Plan submitted to the Regional Water Board on October 17, 2006 (2006 Operations Plan). Based on the Operational Plan criteria, the SVE system was to be shut down for one month when sampling indicated that SVE influent concentration of trichloroethylene (TCE) drops below the CHHSL (California Human Health Screening Levels).<sup>1</sup> The Operational Plan specified that following the one month period, the SVE system would be restarted and an influent sample would be collected. If TCE concentration rebounded to a level above the CHHSL, the system would be operated until the TCE concentration drops below the CHHSL. Based on these criteria, the SVE system was activated 247 out of 393 days, or approximately 63 percent of the time.

---

<sup>1</sup> California Human Health Screening Levels (CHHSLs), California Environmental Protection Agency, January 2005

- c. Finding #14 of the Order re-stated the conclusion of DTSC's HWMP staff, provided in their June 10, 2003 memorandum, that the level of volatile organic compounds (VOCs) in the indoor air at Building 1T exceeds risk-based levels. However, Finding #14 did not state that the sources of VOCs in indoor air at Building 1T also include compounds present in outdoor air that may have originated from off-site sources. Furthermore, DTSC's conclusions and recommendations regarding the potential level of health risk associated with indoor air at Building 1T were based on the presence of all of the VOCs detected in indoor air within the building. DTSC did not quantify the potential additional incremental health risk associated solely from the sub-surface sources.
3. In a letter dated September 30, 2005, HP voluntarily committed to continue to operate the SVE system, until concentrations of TCE in extracted vapor meet the CHHSL (California Human Health Screening Levels) for soil gas, despite the findings of its consultant that there is no unacceptable risk to any occupants of Building 1T due to vapor intrusion.
4. In a meeting with the Discharger on January 24, 2008, Regional Water Board staff requested a revised SVE operations plan to address the potential soil vapor VOC exposures during system shutdown. In a telephone discussion with Regional Water Board staff on February 19, 2008, the Discharger agreed to resume continuous operation of the SVE system until the Discharger had prepared and submitted an acceptable new operations plan for evaluating SVE system shutdown. Thereafter, in March 2008, HP elected to modify the operation of the SVE system to run continuously regardless of the TCE concentrations observed in the system influent samples. HP has operated the SVE system continuously since March 3, 2008.
5. In a letter dated September 29, 2008, Regional Water Board staff requested HP to submit a revised SVE operations plan that would specify a different strategy than in the 2006 Operations Plan for turning the system off and that would reduce the time for responding to rebound levels of VOCs in soil gas, following shutdown of the system.
6. On March 3, 2009, the Regional Water Board issued the Order. The Order included requirements for HP to submit a revised operations plan for the SVE system that would:
  - a. Ensure that the SVE system is operated in a manner that consistently prevents the intrusion of unacceptable levels of VOCs from the subsurface into indoor air at Building 1T;
  - b. Identify a strategy for future evaluation of VOC levels in soil gas beneath Building 1T; and
  - c. Confirm that HP shall operate the SVE system continuously, to prevent VOC vapor intrusion from the sub-surface to indoor air, until the Regional Water Board Executive Officer concurs with a revised SVE operations plan. The *Soil*

*Vapor Extraction System Annual Operation Report (Report)*, dated March 12, 2009, states that the system will continue to operate on a continuous basis.

7. On March 27, 2009, HP submitted the Revised Soil Vapor Extraction System Operation Plan (Revised Plan), dated March 26, 2009. In a letter dated April 22, 2009, following review of the Revised Plan, the Regional Water Board Executive Officer required HP to submit an amended revised operations plan to address specific issues regarding the SVE system shutdown assessment strategy.
8. On May 22, 2009, HP submitted the Amended Revised Soil Vapor Extraction System Operation Plan (Amended Revised Plan), dated May 21, 2009. In a letter dated July 22, 2009, following review of the Amended Revised Plan, the Regional Water Board Executive Officer required HP to submit a second amended revised operations plan to address four specified continuing concerns about the Amended Revised Plan.
9. On August 25, 2009, the Regional Water Board Executive Officer extended the required date for submittal of the revised operations plan to address the four specified concerns to September 21, 2009.
10. On September 15, 2009, Regional Water Board Executive Officer extended the required date for submittal of the revised operations plan to allow for HP and the RWQCB to reach agreement on unresolved issues.
11. On DATE, HP submitted an acceptable revised SVE System Operations Plan that satisfies the requirements of Order No. R1-2009-0025. Therefore, Order No. R1-2009-0025 is no longer needed.
12. This Regional Water Board action to rescind Order No. R1-2009-0025 requiring technical information pursuant to water code section 13267(b) is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) in accordance with Title 14, California Code of Regulations, Sections 15016(b)(3) and 15321.

THEREFORE, IT IS HEREBY ORDERED that Order No. R1-2009-0025 for the Hewlett Packard Valley Site, 1201 Piner Road, Santa Rosa, California, is rescinded.

Ordered by: \_\_\_\_\_

Catherine Kuhlman  
Executive Officer

April 7, 2010