
San Francisco Bay Regional Water Quality Control Board

November 19, 2014
File Nos. 43S0064 & 43S0110 (RWP)

General Electric
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Siemens Corporation (SMI Holding LLC)
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SUBJECT: Approval of Vapor Intrusion Reports for properties at 10900 North Tantau Avenue and 19000 Homestead Road, Cupertino, Santa Clara County

Dear Mr. Hauer and Ms. O'Connor:

As explained below, I approve the following reports and require no further action on vapor intrusion evaluation.

- July 11, 2013, *Final Report for Air Sampling* (Intersil Report)
- December 20, 2013, *Report of Results – Evaluation of Potential Vapor Intrusion* (Residential/Commercial Report)
- April 2014, *Report of Results – Potential Vapor Intrusion Evaluation* (Siemens Report)
- October 7, 2014, *Addendum to Report Results - Evaluation of Potential Vapor Intrusion* (Residential Report).

Background

Off-Property

Our March 8, 2012, letter (Letter 1) approved the February 21, 2012, *Work Plan to Evaluate Potential Vapor Intrusion* (Residential Workplan) to evaluate the off-property residential area of the former Intersil and Siemens properties and required a completion report. You later complied with a Regional Water Board request to add the former AMI Building 700/800. This off-property commercial building is located at 18880 Homestead Road, adjacent to the former Siemens property and the previously established vapor intrusion study area.

Our December 11, 2013, letter required you to submit another residential vapor intrusion workplan to address new technical information from U.S. EPA Region 9. You then submitted

the February 7, 2014, *Second Addendum to Work Plan to Evaluate Potential Vapor Intrusion* (Addendum). Our February 14, 2014, letter (Letter 2) approved the Addendum and required a completion report.

On-Property

Former Intersil Property: Tate Development installed a vapor barrier under the recently constructed building at the former Intersil property at 10900 North Tantau Avenue as part of a property transaction requirement. The tenant breached and later patched the barrier without indoor air testing to verify the adequacy of the repair. Upon notification, the Regional Water Board requested a workplan to evaluate vapor intrusion in our July 2012 email correspondence. Our February 14, 2013, Letter (Letter 3) approved the February 11, 2013, *Proposed Work Plan for Indoor Air Investigation* (Intersil Workplan) to evaluate potential vapor intrusion and required a completion report.

Former Siemens Property: There is no vapor barrier beneath the commercial building at the former Siemens property at 19000 Homestead Road. Our February 28, 2013, letter (Letter 4) approved your February 14, 2014, *Revised Third Addendum to Work Plan to Evaluate Potential Vapor Intrusion* (Siemens Workplan) to evaluate potential vapor intrusion and required a completion report.

Report Summaries

Off-Property

The Residential and Residential/Commercial Reports document the following results of the off-property vapor intrusion evaluation of nine homes in the residential area:

- Tetrachloroethene (PCE) was detected up to 0.42 micrograms per cubic meter (ug/m^3) in one residence (RB-7) with an environmental screening level (ESL) of $0.4 \text{ ug}/\text{m}^3$
- Trichloroethene (TCE) was detected at $0.53 \text{ ug}/\text{m}^3$ in RB-7 with U.S. EPA's regional screening level (RSL) of $0.48 \text{ ug}/\text{m}^3$.
- TCE degradation biproducts were not detected in any of the residences.
- Toluene was detected up to $7.6 \text{ ug}/\text{m}^3$ with an RSL of $5,200 \text{ ug}/\text{m}^3$.

The indoor air PCE and TCE levels slightly exceeded their screening levels. The Residential Report cited the lack of detectable PCE and TCE levels in the other residences, presence of indoor TCE sources, and low levels of these compounds in soil vapor below applicable soil gas screening levels to conclude that PCE and TCE in RB-7 probably originated from indoor sources. Toluene is not considered to originate from the subsurface because toluene is not detected in groundwater and because toluene was detected in outside air at $5.7 \text{ ug}/\text{m}^3$. The residents in RB-7 declined an offer to conduct confirmation sampling. The Residential/Commercial Report recommended no further investigation.

The Residential/Commercial Report documents the following results of the vapor intrusion evaluation of the off-property commercial building off at 18880 Homestead Road with the heating/ventilating/air conditioning (HVAC) off:

- PCE, TCE and their degradation biproducts were not detected.
- Toluene was detected up to $7 \text{ ug}/\text{m}^3$.

Toluene was also detected in the outside air up to 0.41 ug/m³ near the commercial building during the sampling event and at 5.7 ug/m³ in the residential area during that sampling event. The Residential/Commercial Report concluded that vapor intrusion was not occurring in the off-property commercial building and recommended no further investigation.

On-Property

The Intersil Report documents the following results of the vapor intrusion evaluation in the on-property commercial building with the HVAC off as follows:

- TCE was not detected.
- TCE degradation biproducts were not detected.

The Intersil Report concluded that vapor intrusion was not occurring at the on-property commercial building and recommended no further investigation.

The Siemens Report documents the following results of the vapor intrusion evaluation in the on-property commercial building with the HVAC off as follows:

- TCE up to 2.0 ug/m³ with an RSL of 3.0 ug/m³.
- 1,1-dichloroethene (DCE) up to 1.2 ug/m³ with an RSL of 7.7 ug/m³.
- 1,1,1-trichloroethane (TCA) up to 11 ug/m³ with an RSL of 22,000 ug/m³.

The indoor air TCE, DCE, and TCA levels were below the RSLs. The Siemens Report concluded that vapor intrusion was not occurring at the on-property building above regulatory levels of concern and recommended no further investigation.

Regional Water Board Approval

The Reports satisfy the requirements of Letters 1 through 4. I hereby approve them and require no further action on vapor intrusion evaluation.

If you have any questions, please contact Roger Papler of my staff at (510) 622-2435 [e-mail rpapler@waterboards.ca.gov].

Sincerely,

Bruce H. Wolfe
Executive Officer

cc: Mailing List

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