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## San Francisco Bay Regional Water Quality Control Board

### **Fact Sheet: Development on Properties with a Vapor Intrusion Threat – Updated June 2022**

The San Francisco Bay Regional Water Board (Regional Water Board) continues to oversee numerous cleanups at properties where volatile organic compounds (VOCs) are present in soil vapor and development is occurring. These VOCs can pose a health threat to building occupants if they migrate into buildings through vapor intrusion (VI). In June 2022, we issued updated [VI Mitigation \(VIM\) Guidance](#) which is posted on our website. This fact sheet is intended to provide developers, cities, homeowners associations, and the public a summary of expectations for development at properties where VI may pose a threat.

#### **Relationship between VIM and Remediation**

In general, the Regional Water Board considers VIM as an interim measure that is not a substitute for remediation of VOCs in the subsurface. In most cases, for new construction where a VIMS is needed to protect building occupants, we will not approve the VIMS until remediation to the extent feasible has been implemented. This could affect the local agency's permitting decision for occupancy. Cleanup is the best way to reduce the magnitude of VI exposure that could occur if problems arise with VIMS, and it is the best way to reduce the timeframe over which VIMS are needed. Nonetheless, VIMS are often necessary since achieving cleanup standards may take years given currently available remedial technologies. Additionally, VIM may be the only viable long-term response action where remediation is infeasible (e.g., further concentration reductions are not possible and residual concentrations pose a VI threat).

#### **Need for VIMS**

The decision to implement VIM measures and the selection of specific VIM measures should be based on the evaluation of current and future risk and threat to building occupants considering the conceptual site model supported by multiple lines of

evidence (e.g., subsurface conditions, nature and extent of contamination, building characteristics).

### **Importance of VIM Monitoring**

The Regional Water Board relies on monitoring to verify that VIM measures are operating properly and successfully controlling VI exposure. This is because VIM measures, including VIMS, are not fail-safe due to potential construction damage, lack of perfect seals, and future changes such as renovation damage, degradation of components, or changes to building occupancy, use, or ventilation.

### **Regulatory Oversight**

For cases under Regional Water Board oversight, we should be informed early in the development planning process of VI issues and the need for VIMS. When we concur that VIMS are necessary, we will typically need to review the documents summarized in Table 1, below. All documents should be prepared under the direction of an appropriately licensed professional. In addition, Water Board will coordinate with local agencies that have permitting authority over building, grading, and occupancy.

### **Expectations for Regulatory VIMS Approval Timeframes**

For planning purposes, assume the Regional Water Board will need up to 60 days to review each document in Table 1. Additionally, it may take many months to implement feasible remediation. Actual review times may be longer or shorter depending on workload and project complexity. Timeframes should be explicitly discussed with the site's case manager.

### **Questions or Comments**

For general questions about our VIMS guidance, contact [ESLs.ESLs@waterboards.ca.gov](mailto:ESLs.ESLs@waterboards.ca.gov). For questions regarding a specific site, contact the Regional Water Board case manager. Contact information for the case manager can be accessed on the [GeoTracker](https://geotracker.waterboards.ca.gov/) database (<https://geotracker.waterboards.ca.gov/>). To request oversight on a project, refer to the "Requesting Oversight" information and complete the new case application on our [Site Cleanup Webpage](https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/sitecleanupprogram.html#RequestingOversight) ([https://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/sitecleanupprogram.html#RequestingOversight](https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/sitecleanupprogram.html#RequestingOversight)).

**Table 1. Documents Needed for a VIMS**

Document Title	Submittal Timeframe
VIMS Funding Plan	Prior to construction
VIMS Design Plan (Including VIMS design, long-term monitoring plan, and contingency plans)	Prior to construction
VIMS Operation, Maintenance, and Monitoring Plan	After completion of baseline and startup system testing and prior to building occupancy
VIMS Construction Completion Report	Prior to building occupancy
Long-Term Monitoring Reports and Five-Year Review Reports	As long as VIMS monitoring is required
VIMS Incident Reports	30 days after completion of contingency action
Active VIMS Shutdown Workplan or Passive VIMS Decommissioning Workplan	When Regional Water agrees suitable conditions are met
Active VIMS Shutdown Report and Passive VIMS Decommissioning Report	After shutdown or decommissioning evaluations complete