Guidance on Uploading Vapor Intrusion Information into GeoTracker

Electronic Submittal of Information Format

California State Water Resources Control Board

Version 1
August 2019

Web site: http://geotracker.waterboards.ca.gov/esi
# TABLE OF CONTENTS

I. INTRODUCTION .................................................................................................................................................. 1

II. FIELD POINT AND SAMPLING SETUP. .................................................................................................................... 1
    A. SETTING UP FIELD POINTS FOR VAPOR INTRUSION ASSESSMENT ......................................................... 2
    B. SAMPLE ID NOMENCLATURE ......................................................................................................................... 3
    C. CREATING FIELD POINT ............................................................................................................................... 4
        OPTION 1 – MANUALLY ADDING A FIELD POINT .......................................................................................... 5
        OPTION 2 – UPLOADING MANY FIELD POINTS ........................................................................................... 6
    D. EDIT FIELD POINT ........................................................................................................................................... 7
    E. UPLOADING LABORATORY ANALYTICAL DATA TO FIELD POINTS FOR VAPOR INTRUSION ASSESSMENT .......................................................................................................................... 9
    F. GEOTRACKER ESI INFORMATION & CONTACTS ........................................................................................ 11

III. GEOTRACKER VAPOR INTRUSION ESI FUNCTIONALITY .................................................................................. 12
    A. CREATING VAPOR INTRUSION BUILDING PROFILE ................................................................................. 12
    B. BUILDING-SPECIFIC INFORMATION ............................................................................................................... 14
        Table 1: BUILDING SPECIFIC INFORMATION .......................................................................................... 14
    C. CO-LOCATED FIELD POINTS ....................................................................................................................... 17
    D. BUILDING OUTLINE/LOCATION .................................................................................................................... 19
    E. SITE/FACILITY BUILDING LIST .................................................................................................................... 21
    F. EDIT/DELETE VAPOR INTRUSION BUILDING PROFILE .............................................................................. 22

IV. GEOTRACKER VAPOR INTRUSION DATABASE ................................................................................................. 23

APPENDIX A: GLOSSARY OF TERMS .................................................................................................................... 24

FREQUENTLY ASKED QUESTIONS .......................................................................................................................... 25
I. INTRODUCTION

The State Water Resources Control Board (State Water Board) added capabilities to the GeoTracker database including building-specific information for a cleanup case and the ability to differentiate Field Points for collecting samples.

This document provides instruction on how to create relevant vapor intrusion (VI) information to be used in a VI assessment including a building profile and how to assign vapor data related to a specific building. This capability is performed through the VI Building Tool in the electronic submittal of information (ESI) portal of GeoTracker. This document assumes the reader is aware of the GeoTracker ESI process. If unfamiliar with the GeoTracker ESI process, the reader should familiarize themselves with the “Electronic Submittal of Information (ESI) Beginner’s Guide” (ESI Beginner’s Guide). ESI users should use the tool to track VI assessments for their Site/Facility, as well as, list VI building profiles in the study area with an associated Site/Facility.

The VI Buildings Tool contains the ESI user’s Site/Facility, which has associated VI data. The VI building tool should be used for all the ESI user’s Site/Facility with a VI assessment. Through the VI building tool, VI data are uploaded, assigned the appropriate Field Point Class, and then associated with its respective building within the Site/Facility. VI building data attributes include both building attributes (e.g., design, occupants, foundation type) and sample attributes (e.g., location, media, concentration).

Note: The Site/Facility used in this document is not an actual case and created only for demonstration purposes.

II. FIELD POINT AND SAMPLING SETUP

The “ESI Beginners Guide” provides information for ESI accounts, how to claim a Site/Facility, add Field Points to a site, and/or upload (submit) ESI data files.

A summary of the procedures for logging into an ESI account and adding/uploading ESI features is presented below.

Log into GeoTracker ESI: https://geotracker.waterboards.ca.gov/esi/

Once ESI users have access and have followed the steps outlined in the “ESI Beginner’s Guide” to claim their Site/Facility, they may begin to assign Field Points, upload VI data, and create VI building profiles.

A. SETTING UP FIELD POINTS FOR VAPOR INTRUSION ASSESSMENT

When using the new VI features of GeoTracker (explained in subsequent sections), it is necessary that existing and new Field Points used for collection of vapor samples be assigned appropriate names and the appropriate “Field Point Class.” For example, a soil gas sample location (Field Point) can be collected from a temporary grab sample, soil gas probe, or a monitoring gas well. Thus, the soil gas Field Point should be assigned a Field Point Class of Soil Gas (SG), Monitoring Gas Well (MGW), or a Transient Subsurface Sampling Point (TRS), respectively.

**Note: The Field Point is the type of the sample point and a Field Point Class defines the sample media.**

The table below shows the available Field Points, appropriate naming convention, available Field Point Class and description of each of vapor type sample available for the GeoTracker VI functionality.

<table>
<thead>
<tr>
<th>Field Point</th>
<th>Appropriate Field Point Name</th>
<th>Available Field Point Class and (Valid Value)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Air</td>
<td>IA – 1a, IA1, IA – Bath B1, IA – 1</td>
<td>1. Indoor Air (IA)</td>
<td>Air sample collected from within building.</td>
</tr>
<tr>
<td>Subslab</td>
<td>SSV– 1a, SSV1, SS – Bath B1, SS – 1</td>
<td>1. Subslab Soil Vapor (SSV)</td>
<td>Soil vapor sample collected beneath building foundation footprint.</td>
</tr>
<tr>
<td>Crawl space</td>
<td>CSA – 1, CSA – 1a</td>
<td>1. Crawl Space Air (CSA)</td>
<td>Air sample collected in the crawl space area of the building.</td>
</tr>
<tr>
<td>Soil Gas</td>
<td>SG – 1, SG – 1a, SG – 1b, SG1, GRB – 1a</td>
<td>1. Soil Gas (SG) 2. Monitoring Gas Well (MGW) 3. Transient Subsurface Sampling Point (TRS)</td>
<td>Soil vapor sample collected outside of the building foundation footprint. For non-permanent sample locations, use transient subsurface sampling point.</td>
</tr>
<tr>
<td>Ambient Air/Outdoor</td>
<td>AAS – 1, AAS – 1a, OA – 1, OA – 1a</td>
<td>1. Ambient Air Sample (AAS)</td>
<td>Air sample collected outside of the building.</td>
</tr>
<tr>
<td>Sewer Air</td>
<td>SWAG – 1, SWAG – 1a</td>
<td>1. Sewer Air Gas (SWAG)</td>
<td>Air/vapor sample collected within a sewer line.</td>
</tr>
<tr>
<td>Groundwater</td>
<td>MW – 1, GB – 1a</td>
<td>1. Remediation/Groundwater Monitoring Well (MW) 2. Transient Subsurface Sampling Point (TRS)</td>
<td>Groundwater sample collected associated with Site/Facility. For nonpermanent sample locations, use transient subsurface sampling point.</td>
</tr>
</tbody>
</table>

**Note: Many existing vapor sample Field Points with a Field Point Class identified as “vapor” should be changed for existing Field Points that are to be used in a vapor intrusion assessment. To re-assign a Field Point to the appropriate Field Point class use the edit Field Point functionality in the ESI portal (refer to Section II.D).**
B. SAMPLE ID NOMENCLATURE

The SAMPID (Sample ID) field in the GeoTracker Electronic Deliverable Format (EDF) (EDFSAMP, EDFTEST, and EDFFLAT files) is the unique identifier assigned to a field sample as it appears on the Chain-of-Custody. The Sample ID normally is the same as the Field Point Name, although for certain scenarios the Sample ID will be different to indicate heating, ventilation, and air conditioning (HVAC) conditions or subsurface depth. The Sample ID field entry can be up to 25 characters long.

Heating, Ventilation, and Air Conditioning Settings

As part of VI investigations, some information about HVAC settings should be contained within the Sample ID. As such, a Sample ID for an indoor air or subslab sample should indicate if heating or air conditioning is on or off. It is highly recommended that the nomenclature presented in the table below for Sample ID be used when submitting this sample event scenario to standardize vapor entry and to help identify HVAC conditions during sample collection in the database.

<table>
<thead>
<tr>
<th>SAMPID</th>
<th>Field Point Name</th>
<th>Field Point Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA – 1 – HEAT ON</td>
<td>IA – 1</td>
<td>Indoor Air</td>
<td>Air sample collected from within a building with the heating system on.</td>
</tr>
<tr>
<td>IA – 1 – COOL ON</td>
<td>IA – 1</td>
<td>Indoor Air</td>
<td>Air sample collected from within a building with the cooling system on.</td>
</tr>
<tr>
<td>IA – 1 – HVAC OFF</td>
<td>IA – 1</td>
<td>Indoor Air</td>
<td>Air sample collected from within a building with the HVAC system off.</td>
</tr>
<tr>
<td>SSV – 1 – HEAT ON</td>
<td>SSV – 1</td>
<td>Subslab</td>
<td>Subslab sample collected from within a building with the heating system on.</td>
</tr>
<tr>
<td>SSV – 1 – COOL ON</td>
<td>SSV – 1</td>
<td>Subslab</td>
<td>Subslab sample collected from within a building with the air conditioning system on.</td>
</tr>
<tr>
<td>SS – 1 – HVAC OFF</td>
<td>SSV – 1</td>
<td>Subslab</td>
<td>Subslab sample collected from within a building with the HVAC system off.</td>
</tr>
</tbody>
</table>

Soil Gas Depths for a Single Sampling Point

As part of VI investigations, information about depth-discrete sampling performed within a single sampling point should be contained within the Sample ID. As such, a Sample ID for this type of soil gas sample should indicate at what depth in feet the sample was collected. It is highly recommended that the nomenclature presented in the table below for Sample ID be used when submitting this sample event scenario to standardize vapor entry in the database.

<table>
<thead>
<tr>
<th>SAMPID</th>
<th>Field Point Name</th>
<th>Field Point Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG – 1a7.5</td>
<td>SG – 1</td>
<td>Soil Gas</td>
<td>Soil gas samples collected from a single sampling point at 7.5 feet and 15.0 feet.</td>
</tr>
<tr>
<td>SG – 1b15.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

2 [https://www.waterboards.ca.gov/ust/electronic_submittal/docs/faq.pdf](https://www.waterboards.ca.gov/ust/electronic_submittal/docs/faq.pdf)
C. CREATING FIELD POINT

Under Tools on the left-hand side, select “Edit Field Points”; the user’s claimed sites will be displayed.

Select the “Site/Facility” for adding/uploading Field Points.

The Site/Facility page has two options for creating a Field Point and assigning a Field Point Class for every sample location at the study area for the purposes of assessing VI. Described below is how ESI users can either add individual Field Points manually (Option 1) or use an upload feature to add more than one Field Point at a time (Option 2).

It is critical to have a consistent Field Point naming system and assign the appropriate Field Point Class. This will be important when assigning a Field Point to a VI building profile.
**OPTION 1 – MANUALLY ADDING A FIELD POINT**

The ESI user will manually enter the Field Point Name and select the Field Point Class. When appropriate the depth (top of casing to well screen), length of well screen, and Field Point description should be included (see below).

Select “Add Field Point/Well Construction.”

Input the assigned Field Point name and select the appropriate Field Point Class from the drop-down menu (described in Section II.A).

For Soil Gas and Groundwater Field Points, include the depth from the top of the casing to the well screen and the length of well screen.
For Field Point Description include the buildings name associated with the Field Point.

Select “Add This Field Point” to store the Field Point in the database.

**OPTION 2 – UPLOADING MANY FIELD POINTS**

The ESI user will use an upload feature to add more than one Field Point at a time by using a text editor to create the upload file (see below).

Select “Upload Field Points/Well Construction.”
Refer to “Field Point Upload Instructions” (shown below) for the type of files and format required for using this option.

Choose the appropriate file and then select “Upload file” to store Field Points in the database.

D. EDIT FIELD POINT

Once Field Points are added/uploaded to a Site/Facility, the list of Field Points for the VI study area will be stored in one location within the database shown below. This page also has the functionality to edit or delete Field Point information. Normally, the Alternative Facility ID is left blank.
To edit Field Point Class, use the drop-down menu (refer to Section II.A).

To edit depth (top of casing to well screen), length of well screen, or Field Point description, manually enter changes.

To save edits, select **Save Changes** located at the bottom of the page.

To delete a Field Point, select **X** on the left-hand side of the list.

The system will ask the user to confirm deletion of the entry; select “OK” to delete Field Point from database.

---

**Note:** The Field Point name can only be edited by deleting the Field Point and recreating the Field Point.

**Note:** Once laboratory analytical data is uploaded to a Field Point, the Field Point is no longer available to be deleted.
E. UPLOADING LABORATORY ANALYTICAL DATA TO FIELD POINTS FOR VAPOR INTRUSION ASSESSMENT

Once Field Points are created in the database for a Site/Facility, the user will need to upload laboratory analytical data (EDF) and the associated GEO_Report (written report) for a VI assessment. EDF files are normally created by the laboratory, not by the Responsible Party (RP) or consultant, but are normally uploaded by the RP or consultant, not by the laboratory (for information about the formatting and structure of EDF files, refer to “Technical Information on Uploading data”). ³ The following sections outline how to check the data format, upload analytical data, and upload the associated report.

Check Laboratory Analytical Data

Before the laboratory analytical data for a VI assessment is uploaded to the database, verify that the EDF is valid to prevent errors in the upload format.

Under tools on the left-hand side, select “Check EDD.”

Under check EDD, select “EDF.”

Follow “EDF Upload Instructions” to error-check the lab analytical data file.

Upload Laboratory Analytical Data

Once the laboratory analytical data is verified, the EDF is ready to be uploaded to Field Points in the database.

³ https://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml
Under tools on the left-hand side, select “Upload EDD.”

Under Upload EDD, select “EDF.”

Follow “EDF Upload Instructions” to upload lab analytical data file.

**Note:** The UPLOAD TITLE and REPORT TYPE for laboratory analytical data should match the UPLOAD TITLE and REPORT TYPE of its associated GEO_REPORT (the written report).

Upload GEO_Report Associated With Laboratory Analytical Data

The GEO_Report is an electronic version (PDF file format) of the complete written report. Upload the GEO_Report with the associated laboratory analytical data.

Under Tools on the left-hand side, select “Upload EDD.”
Under Upload EDD, select “GEO_Report.”

Select the facility for uploading.

Follow the “GEO_Report Upload Instructions” to upload the report associated with the laboratory analytical data.

F. GEOTRACKER ESI INFORMATION & CONTACTS

For additional information, refer to GeoTracker’s ESI informational page:
https://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml or contact the GeoTracker Help Desk: geotracker@waterboards.ca.gov.
III. GEOTRACKER VAPOR INTRUSION ESI FUNCTIONALITY

The process for adding VI building profiles to a Site/Facility that will be used in a vapor intrusion assessment is outlined below. This process uses GeoTracker’s ESI functionality for RPs and assigned contractors to enter the information.

A. CREATING VAPOR INTRUSION BUILDING PROFILE

After adding Field Points and assigning the appropriate Field Point Class (refer to Section II.C), the next step is to create a building’s VI building profile in the database. The VI building profile will also assist the user in co-locating Field Points within and in proximity to the building. It is important to co-locate indoor air and subslab samples when possible. VI building profiles are part of the conceptual site model for a Site/Facility and inputting each building’s information into the database stores all available vapor data for a study area in one location.

To add a VI building profile to a Site/Facility, under Tools on the left-hand side, select “Other Tools” and then select “Enter/Edit VI Buildings.” This will display the available Site/Facilities the user has claimed.

Select the Site/Facility to begin the process of adding VI building profiles for onsite and off-site buildings within the VI study area.

Select “Add a New VI Building” to create a VI building profile.
Shown below is the VI building profile page.

The locator pin 📍 indicates the Site/Facility GeoTracker location.

The Site/Facility’s name, global ID, and address are displayed on the top menu and will be the same for all buildings in the study area for the purposes of assessing VI.

**Note:** There are three sections (building-specific information, co-located Field Points, and building outline/location) to complete in the VI building profile (outlined below).


B. BUILDING-SPECIFIC INFORMATION

The first section of the VI building profile is the building-specific information. This includes the Building Name, Onsite/Offsite Building, Year Built, Building Design, Building Occupants, Foundation Type, Ceiling Height (feet), Number of Floors, VI Mitigation, HVAC System, and Building Area.

Boxes that are blank indicate fields that will need to be entered manually.

Boxes with a triangle in the right corner indicate a drop-down menu. The options are defined in Table 1 below for each field.

Table 1: BUILDING SPECIFIC INFORMATION

<table>
<thead>
<tr>
<th>Field</th>
<th>Drop-Down Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Name</td>
<td>- -</td>
<td>User-defined name for a site building.</td>
</tr>
<tr>
<td>Onsite/Offsite Building</td>
<td>Offsite – building is outside of facility/site footprint</td>
<td>Building is outside of site/facility property boundary.</td>
</tr>
<tr>
<td></td>
<td>Onsite – building is within facility/site footprint</td>
<td>Building is within site/facility property boundary.</td>
</tr>
<tr>
<td>Year Built</td>
<td>- -</td>
<td>The year the building was built.</td>
</tr>
<tr>
<td>Building Design</td>
<td>Single Unit Residential</td>
<td>A single unit building designed for residential use (e.g., single-family home).</td>
</tr>
<tr>
<td></td>
<td>Multi-Unit Residential</td>
<td>Multiple unit building designed for residential use (e.g., duplex, apartments).</td>
</tr>
<tr>
<td></td>
<td>Single Unit Commercial</td>
<td>A single unit building designed for commercial use of one business.</td>
</tr>
<tr>
<td></td>
<td>Multi-Unit Commercial</td>
<td>A building with multiple separate units designed for commercial use (e.g., strip mall).</td>
</tr>
<tr>
<td></td>
<td>Multi-Unit Mixed Use</td>
<td>A multiple unit building with a combination of units either designed for commercial or residential use.</td>
</tr>
<tr>
<td></td>
<td>Auditorium</td>
<td>A large building or hall with an open space designed for gatherings (e.g., church, theater).</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>A large building designed with multiple rooms to facilitate educational activities.</td>
</tr>
<tr>
<td>Field</td>
<td>Drop-Down Option</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Field</td>
<td>Industrial</td>
<td>A large building designed for the systematic processing of goods or products (e.g., packaging plant).</td>
</tr>
<tr>
<td></td>
<td>Manufacturing Facility</td>
<td>A building designed for the manufacturing of goods from raw materials (e.g., chemical plants, research and development facilities).</td>
</tr>
<tr>
<td></td>
<td>Warehouse</td>
<td>A large building designed to store raw materials or manufactured goods.</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>A building with a design type not listed.</td>
</tr>
<tr>
<td>Building</td>
<td>Residential</td>
<td>Occupants could be inside building for up to 24 hours a day.</td>
</tr>
<tr>
<td>Occupants</td>
<td>Commercial</td>
<td>Occupants could be inside building for up to 8 hours a day (typical work day).</td>
</tr>
<tr>
<td></td>
<td>Residential Unit Over</td>
<td>Residential use is prohibited only on the first floor for the occupied space.</td>
</tr>
<tr>
<td></td>
<td>Commercial Unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sensitive Use</td>
<td>Building occupants that may have significantly increased sensitivity or exposure to contaminants by virtue of their age (e.g., school, child care, retirement community) or health condition (e.g., medical facility).</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Building occupants not listed.</td>
</tr>
<tr>
<td>Foundation</td>
<td>Slab-on-Grade</td>
<td>There is no space between the ground and the foundation system (bedding gravel and slab).</td>
</tr>
<tr>
<td>Type</td>
<td>Crawl Space</td>
<td>An area of limited height between the ground surface and the ground floor of a building, giving access to wiring and plumbing.</td>
</tr>
<tr>
<td></td>
<td>Partial Crawl Space</td>
<td>Foundation is partially a crawl space and partially slab-on-grade.</td>
</tr>
<tr>
<td></td>
<td>Basement</td>
<td>One or more floors of a building that are either completely or partially below the ground surface. Basement foundation is assumed slab-on-grade.</td>
</tr>
<tr>
<td></td>
<td>Partial Basement</td>
<td>Foundation is partially a basement and partially slab-on-grade.</td>
</tr>
<tr>
<td></td>
<td>Podium</td>
<td>The lowest floor of the building is constructed with more than 5 feet above the ground surface and not regularly occupied (e.g., car port beneath a building).</td>
</tr>
<tr>
<td></td>
<td>Earthen</td>
<td>Made of compressed earth with no covering.</td>
</tr>
<tr>
<td></td>
<td>Secondary Slab Pour</td>
<td>Modifications have been made to the original slab-on-grade foundation (e.g., remodels, garage addition, porch addition).</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>Foundation type is not listed.</td>
</tr>
<tr>
<td>Field</td>
<td>Drop-Down Option</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ceiling Height (ft)</td>
<td>- -</td>
<td>The distance from the averaged floor height to the averaged ceiling height of the lowest floor, measured in feet.</td>
</tr>
<tr>
<td># Floors (excluding Basement)</td>
<td>- -</td>
<td>Total number of floors within the building excluding the basement (i.e., 3 story building = 3).</td>
</tr>
<tr>
<td>VI Mitigation</td>
<td>Vapor Intrusion Barrier Only</td>
<td>A subslab liner (passive membrane or vapor barrier) is a material or structure installed below a building to limit the upward flow of vapors.</td>
</tr>
<tr>
<td></td>
<td>Passive Vented System</td>
<td>A system designed to function by venting soil gas (or crawl space air) to the exterior of the building. Passive venting relies on natural thermal and wind effects to withdraw vapors from below the building.</td>
</tr>
<tr>
<td></td>
<td>Active Vented System</td>
<td>A venting system equipped with a fan-powered vent that actively draws soil gas (or crawl space air) from beneath the building to the exterior of the building.</td>
</tr>
<tr>
<td></td>
<td>Subslab Depressurization</td>
<td>A system designed to continuously create lower pressure directly underneath a building floor relative to the pressure within the building.</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>A vapor intrusion mitigation system not listed above.</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>No vapor intrusion mitigation system in place.</td>
</tr>
<tr>
<td>HVAC System</td>
<td>Cooling Only</td>
<td>The building contains a system whose purpose is to provide cooling or significant ventilation within the building (e.g., air conditioner, whole house fans).</td>
</tr>
<tr>
<td></td>
<td>Heating Only</td>
<td>The building contains a system whose purpose is to generate heat within the building (e.g., furnaces, fireplaces, baseboard heaters, radiators, or other regularly used system).</td>
</tr>
<tr>
<td></td>
<td>Heating &amp; Cooling</td>
<td>The building contains both a cooling system and a heating system.</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>No heating or cooling systems are installed in the building.</td>
</tr>
<tr>
<td>Building Area (ft²)</td>
<td>- -</td>
<td>The building’s foundation footprint in square feet (e.g., 1,200 ft²).</td>
</tr>
</tbody>
</table>
C. CO-LOCATED FIELD POINTS

The second section of the VI building profile allows the user to link each Field Point with a building for a VI assessment with the following Field Point Class types: indoor air, subslab, crawl space, soil gas, ambient (outdoor) air, sewer gas air, and groundwater. Within a building the user should co-locate the indoor air Field Points with the associated subslab (or crawl space) Field Points that are collected within the same area of the building (e.g., bathroom, kitchen, office, etc.). The co-located indoor air and subslab Field Points are the primary data pairs for a building. All applicable soil gas, ambient air, sewer air gas, and groundwater Field Points should be linked to the building as secondary data Field Points, and if appropriate linked to the primary data pair.

Primary Data Pair – Indoor Air and Subslab (or Crawlspace) Field Points

Secondary Data – Soil Gas, Ambient Air, Sewer Air Gas, and Groundwater Sample Field Points

Adding a Co-Located Field Point Group

The database has the capability for the user to set up multiple Field Point Groups for a building. All co-located and linked Field Points for a building should be listed in this section of the VI building profile tool.

The “Co-Located Points Name” refers to either the specific area within the building (e.g., bathroom, kitchen) where the primary data pairs were collected or to the building name linked to the secondary data Field Points.

To set up multiple Field Point Groups, select “Add Additional Co-Location Field Point Group” for as many co-located or linked Field Points as needed.

Once a co-located area has an assigned Co-Located Points Name (e.g., bathroom, building name), the associated primary data pair and secondary data Field Points should be populated by using the drop-down menu.
**Co-Locating Field Point Process – Primary Data Pair**

First, populate the primary data pair by clicking in the Indoor Air Field Point box; then select from the drop-down menu, and select the correct Field Point that is associated with that specific area.

Next, complete the primary data pair by clicking in the Subslab/Crawlspace Field Point box and selecting from the drop-down menu the correct Field Point that is paired with the Indoor Air Field Point and the specific area.

Continue to add the primary data pairs and co-locate to the specific areas within the building.

**Co-Locating Field Point Process – Secondary Data**

Next, populate the secondary data Field Points by clicking in the Soil Gas Field Point box, Ambient Air Field Point box, Sewer Air Gas Field Point box, or Groundwater Sample Field Point box, and select from the drop-down menu the correct Field Point that is linked to the building.

To link a secondary data Field Point to a primary data pair, select a secondary data Field Point from the drop-down box menu on that row.

To link a secondary data Field Point to the building, select “Add Additional Co-Location Field Point Group” to add a blank Co-Located Points Name.
Enter the appropriate building name, then select the secondary data Field Points from the drop-down box menu on that row.

Check to make sure the appropriate Field Point is assigned to the correct Co-Located Points Name.

Note: The drop-down boxes will only populate with the available Field Point that was assigned to a Field Point Class (refer to Section II.C). It is critical to check the Field Point to ensure it has the appropriate “Field Point Class,” otherwise it will not populate as an option in the drop-down menu.

D. BUILDING OUTLINE/LOCATION

The third section of the building profile defines the spatial attributes of a building and Field Points associated with them. Certain Field Points do not have geospatial data collected and cannot be placed on a map, therefore drawing the building on the map is representative of those sample locations.

Select the drawing tool at the top of the map to start drawing the building outline.
Each click on the map will place a point; use as many points necessary to outline the building shape.

To complete the shape, double-click with mouse or select the hand at the top of the map and the shape will connect itself and fill in with a shaded red color. Once the shape is connected, will appear in place of .

Select “Clear Drawing” if a mistake was made while drawing and the building outline/location will be cleared.
To complete the VI building profile, select “Add This Building” located at the bottom of the page.

The VI building profile is now stored in the database.

E. SITE/FACILITY BUILDING LIST

Once a VI building profile is stored within the Site/Facility database, the list of onsite and offsite buildings and their locations will be displayed on the Site/Facility page shown below. This page also has the functionality to edit or delete a building (described in the following section).
F. EDIT/DELETE VAPOR INTRUSION BUILDING PROFILE

To edit or input additional building-specific information to a VI building profile, select located to the left of “Building Name”; this returns the user back to the VI building profile page.

Note: Since the VI building profile has already been stored in the database, will now be at the bottom of the VI building profile page.

Select “Save Changes” to save modifications to the VI building profile.
To delete a VI building profile, select [DELETE] located to the right of VI Mitigation.

The system will ask the user to confirm deletion of the building, select “OK” to delete the building from the database.

Deleting a building from the database will not delete Field Points from the database.

IV. GEOTRACKER VAPOR INTRUSION DATABASE

One component of the State Water Board data management system (GeoTracker) is the VI database, which has the capability to easily accept electronic data to populate vapor concentration information for a Site/Facility and differentiate vapor concentration by the sample media. The VI database will also include building-specific information. Housing all this information in one database is a tool that helps RPs, contractors, and regulators evaluate sites for risk. The vapor concentration information is available through the public and secure portals.

The State Water Board will be assessing future modifications to the VI database to help with VI investigations.
APPENDIX A: GLOSSARY OF TERMS

**EDD (Electronic Data Deliverable)** – Information stored in a defined format, accessible via a computer (e.g., stored on diskette, internal hard drive, CD-ROM, magnetic tape, etc.).

**EDF (Electronic Data Deliverable Format)** – A comprehensive data standard designed to facilitate the transfer of electronic data files between data producers and data users. The GeoTracker EDF is specific to analytical laboratory data.

**ESI (Electronic Submittal of Information)** – Data submitted electronically.

**Field Point** – The name of a sample location (e.g., IA-1, SG-1, SSV-1, etc.).

**Field Point Class** – Defines the sample location’s medium (e.g., indoor air sample, soil gas sample, subslab sample, etc.).

**Study Area** – The area that encompasses any building undergoing a vapor intrusion assessment for a particular Site/Facility.

**Valid Value** – Specially assigned, standardized coded value designating an approved (i.e., “valid”) value for entry into a field in the database.

**Vapor Intrusion Building Profile** – Information collected on an individual building; the “profile” stores building-specific information, co-located Field Points, and building outline/location in one location in the GeoTracker database.
FREQUENTLY ASKED QUESTIONS

1. Why doesn’t my Field Point show up as part of the co-located Field Point drop-down option?
   Check that the Field Point has the appropriate Field Point Class. Field Points will only populate in the associated Field Point class as a drop-down option.

2. What do I do with previously uploaded vapor concentration data?
   Previously uploaded vapor concentration data will still be in the database and will not change. It will be useful to update the Field Point Class for the vapor (Field Point) to represent the sample medium. Prior to the added capabilities of the database, Field Point Class options were limited to vapor or air.

3. Why am I getting a Global ID or Field Point Name error while checking an EDF file?
   The user uploading does not have access to the specific site (labs typically do not have access); leave both checkboxes (“Check Global_ID and Field Point Names” and “Use Global_ID from EDF upload file”) unchecked, and the user will be able to verify if the lab analytical data has errors.

4. What if I am the lab trying to upload EDF to a Site/Facility and the Site/Facility is not listed?
   A lab will not be able to upload EDF to a Site/Facility without the Responsible Party (RP) claiming a site first. Contact the RP to gain access.

5. How do I delete a Field Point after uploading an EDF file?
   Contact the GeoTracker Help Desk for assistance in deleting a Field Point.

6. How do I make corrections, additions, or delete an EDF submittal?
   If your submittal has not been “Received” yet, you can delete it and then resubmit a corrected version. “Pending” submittals uploaded by you will have a “Delete Submittal” option. If your submittal has already been “Received,” you’ll need to contact your Lead Agency Regulator, who can retroactively “Deny” a previously “Received” submittal.

7. Where do I get help for troubleshooting?
   Contact the GeoTracker Help Desk: geotracker@waterboards.ca.gov.