ESI BEGINNER’S GUIDE FOR RESPONSIBLE PARTIES (Facility Owners/Operators)

JULY 2019

ESI Homepage:
https://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/
TABLE OF CONTENTS

1.0 INTRODUCTION ........................................................................................................... 1
  1.1 About GeoTracker ....................................................................................................... 1
  1.2 What are the State Water Board Electronic Data Submittal Requirements? .......... 2
  1.3 Responsible Party Responsibilities ............................................................................. 2
  1.4 What Information Should Be Submitted (Uploaded)? .................................................. 2

2.0 ESI START-UP GUIDELINE .......................................................................................... 4
  STEP 1: Creating a Secure GeoTracker ESI Account and Logging In......................... 4
  STEP 2: Claiming Sites/Facilities ..................................................................................... 6
  STEP 3: How to Create and Upload Field Point Names to Site ...................................... 10
  STEP 4: Upload (Submit) Data and Reports ................................................................... 12
  STEP 5: Delete an Electronic Submittal after Uploading ................................................. 31
  STEP 6: DENIED Electronic Submission Notification ...................................................... 33

3.0 ADDITIONAL RESOURCES ....................................................................................... 34
  3.1 Contact the GeoTracker Helpdesk: ........................................................................... 34
  3.2 Online Resources ................................................................................................ 34
  3.3 Guidance Documents .......................................................................................... 35

APPENDIX A ..................................................................................................................... 36
  FIGURE 1: START-UP TASKS ....................................................................................... 36
  FIGURE 2: ESI SUBMITTAL PROCESS OVERVIEW AND DATA FLOW ...................... 37

APPENDIX B ..................................................................................................................... 38
  B.1 INDIVIDUALS, ENTITIES, AND RESPONSIBILITIES .......................................... 38
  B.2 IMPORTANT ESI TERMS DEFINED ................................................................... 41

APPENDIX C ..................................................................................................................... 45
  Uploading Multiple Field Point Names (FPNs) ............................................................. 45

APPENDIX D ..................................................................................................................... 49
  Error Checking A New Electronic Submittal of Information (ESI) Data File ...................... 49
1.0 INTRODUCTION

This guide is intended to provide owners/operators (Responsible Parties [RPs]) a generalized step-by-step guideline for preparing and uploading (submitting) compliance data and reports to the GeoTracker system. Submitting compliance data and reports to GeoTracker enables RPs to satisfy the reporting requirement of regulatory orders, waste discharge requirements, etc., and allows the lead regulatory agency caseworker to review, approve, or deny submittals electronically, as well as to make documents and data publicly accessible.

1.1 About GeoTracker

GeoTracker (https://geotracker.waterboards.ca.gov/) is the State Water Resources Control Board’s (State Water Board) internet-accessible database system used by the State Water Board, Regional Water Quality Control Boards (Regional Water Boards), and local agencies to access and archive compliance data from authorized or unauthorized discharges to land, or unauthorized releases of hazardous substances from underground storage tanks. This system consists of a relational database, on-line compliance reporting, a geographical information system (GIS) interface, and other features that are utilized by the State Water Board, Regional Water Boards, local agencies, regulated industry, and the public to input, manage, or access compliance and regulatory tracking information. GeoTracker was developed in 2000 in accordance with a mandate by the California State Legislature to investigate the feasibility of establishing a statewide GIS-based program to compile data for leaking underground storage tank (LUST) sites. The use of GeoTracker has since expanded to include information for other types of facilities making it a critical resource for both regulators and the public.

GeoTracker provides access to statewide environmental data and regulatory information for the following types of sites:

- Land Disposal sites (Landfills, Surface Impoundments, Waste Piles);
- Cleanup Program Sites (CPS, also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites);
- Composting Operations;
- Leaking Underground Storage Tanks (LUST) cleanup sites;
- Permitted Underground Storage Tank (UST) facilities (Note: Permitted UST information is now being maintained by California Environmental Reporting System (CERS) (http://cers.calepa.ca.gov/); information in GeoTracker related to Permitted USTs is no longer current);
- Military sites (including Military UST sites, Military Privatized sites, and Military Cleanup sites [formerly known as Department of Defense (DOD) non-UST]);
- Waste Discharge Requirement (WDR) sites;
- Irrigated Lands Regulatory Program (ILRP) sites; and
- Confined Animal / Concentrated Animal Feed Lots Facilities.
1.2 What are the State Water Board Electronic Data Submittal Requirements?

Electronic reporting regulations (California Code of Regulations, Title 23, Division 3, Chapter 30 and Title 27, Division 3) require electronic submittal of any report or data required by a regulatory agency. Submission dates are set by the Regional Water Board or by other regulatory agencies. Once a report/data is successfully uploaded and approved by the lead agency caseworker, the reporting requirement is considered satisfied (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

The State Water Board has several goals for implementing **Electronic Submittal of Information (ESI):**

1. Electronic reporting will provide decision-makers with more accurate, up-to-date, accessible, and complete statewide information.
2. Electronic reporting will enhance the capabilities of the State Water Board, Regional Water Boards, and local agencies in monitoring and assessing threat of contamination to drinking water wells.
3. Electronic reporting facilitates public access to information and transparency; rather than traveling to a government building to review a paper copy of a case file, interested parties can review and analyze information through the internet.

1.3 Responsible Party Responsibilities

**RPs** have two primary electronic reporting responsibilities:

1. Claiming site/facility(s) in GeoTracker. *(Claiming means the RP, or their Authorized RP Agent [i.e. consultant], has obtained upload access to the RP’s site/facility).*
2. Uploading the required ESI compliance data and reports.

If the RP does not have Internet access or does not wish to perform the electronic role of RP, they can choose not to create a GeoTracker RP account and instead can delegate the claiming and upload duties to a consultant acting as their **Authorized RP Agent**. If the RP chooses to create an RP GeoTracker account (i.e. an account with the user type Responsible Party), and have claimed their site/facility, they have the options to upload themselves, having a consultant upload for them as an Authorized RP Agent, or grant secondary access to **Contractors** and/or **Laboratories** to upload information. Even if an RP delegated an Authorized RP Agent, RPs are ultimately responsible for ensuring submittals are uploaded in accordance with the facility’s requirements. Only RPs and Authorized RP Agents can grant secondary access to Contractors and Laboratories. **Figure 1** (Appendix A) provides a summary of ESI tasks and responsibilities for the RP, Authorized RP Agent, Contractor and Laboratory.

1.4 What Information Should Be Submitted (Uploaded)?

The information that should be submitted includes any report or data required by a regulatory agency. Examples of data and reports may include, but are not limited to the following:

- **REPORTS** - Technical reports, design plans, questionnaires, work plans, sampling and analysis plans, site conceptual models, sampling and analysis reports, quarterly/annual monitoring report, etc.
- **LABORATORY ANALYTICAL DATA** - Electronic Deliverable Format (EDF) may include, but is not limited to the following: soil sampling data, groundwater monitoring data, leachate sampling data, etc.

- **SAMPLE LOCATIONS** - Surveyed latitude and longitude sample location are required for all of groundwater monitoring wells to be submitted as part of the GEO_XY file.

- **GROUNDWATER MONITORING WELL ELEVATION DATA** - Surveyed elevation measurements to the top of groundwater well casings are required for all groundwater monitoring wells to be submitted as part of the GEO_Z file.

- **GROUNDWATER WELL DATA** - Depth to Water, Well Operational Status)

- **SITE MAP**

  Figure 2 in Appendix A provides an overview of the ESI submittal process and data flow process for RPs, Authorized RP Agents, Contractors and Laboratories.
STEP 1: Creating a Secure GeoTracker ESI Account and Logging In

A. GeoTracker requires a USERNAME and PASSWORD (the username/password pair is sometimes referred to as your “login”) to gain access to the secure ESI section of GeoTracker. RP, Authorized RP Agent, Contractor or Laboratory can obtain a Username/Password by going to the ESI webpage at: http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/. After ESI access is obtained, access to specific sites/facilities must next be obtained in order to upload (submit) data and reports.

Refer to Appendix B for definitions of RP, Authorized RP Agent, Contractor or Laboratory. For users with an existing Username/Password proceed to STEP 2 for instructions on how to request access a site/facility. For instructions on how to create and upload Field Point Names proceed to STEP 3; for instructions on how to upload data and reports proceed to STEP 4; and for instructions on how to delete a submittal after uploading proceed to STEP 5.

B. LOG IN TO GEOTRACKER ESI OR REQUEST PASSWORD

http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/
To obtain initial access, click the **Password Request** link at the bottom of the ESI login page. Complete all the information in the **Requesting Login** form as well as select the appropriate user type (i.e. RP). Click the **Submit Form** when finished. For Authorized RP Agent Instructions please refer to the ESI Beginner's Guide for Authorized Responsible Party Agents.

*An email will be sent with further instructions. Return to the login page and enter your username and password as indicated in the login screen and click Login to ESI to continue.*
STEP 2: Claiming Sites/Facilities

A. A site must be claimed by the RP or by an agent acting on behalf of the RP (Authorized RP Agent) prior to (1) other entities receiving access to a site, (2) uploading Field Point Names (FPN), and (3) submitting ESI compliance data and reports. A “claimed” site is a site/facility that the RP (or their Authorized RP Agent) requested and State Water Board granted access. A FPN is defined in STEP 3: How to Create and Upload Field Point Names to Site.

A Contractor or Laboratory may request secondary access to sites/facilities to upload Field Point Names, ESI compliance data, and reports. Contractor and Laboratories do not have authority to approve access requests by other parties. Site/Facility access can be denied or revoked by an RP or Authorized RP Agent.

While being logged into their GeoTracker account, an RP or Authorized RP Agent may claim a site by following the Request Additional Facilities steps provided below. The State Water Board may approve site access requests in 1 to 3 business days. Once the State Water Board has approved the request, the RP or Authorized RP Agent will have successfully met the prerequisite regulatory compliance requirement of claiming their site/facility in GeoTracker. If additional assistance is needed to find and/or request a site/facility Global ID, the GeoTracker Help Desk can be contacted via email at geotracker@waterboards.ca.gov or telephone at (866) 480-1028.

B. Finding sites/facilities in the database: From the Facility Management section in the left-hand column, a site/facility search may be conducted through the Request Additional Facilities search option, as shown in Section B.a.ii and iii, below. Sites/facilities with an existing record in GeoTracker can be searched using the Global ID (provided by Regional Board staff), and by a full or partial facility name or address. The Global ID is the unique GeoTracker identifier associated with a specific case at a site/facility. A site/facility may have one or more unique Global ID numbers. The Global ID number appears to the left of the facility name in the results window after completing a facility search, shown below. Regional Water Board staff can provide a new Global ID number for sites/facilities that do not currently have a Global ID.

a) RESPONSIBLE PARTY (RP) – To claim a site, RPs must request access from Water Board GeoTracker staff and obtain approval. To request access:

i) Log into the GeoTracker ESI home screen by entering your username and password as indicated in the login screen and select the Login to ESI (https://geotracker.waterboards.ca.gov/esi/login) option to continue to the GeoTracker home page for RPs/Authorized RP Agents. STEP 1 describes how to get a username and password.
ii) Hover the cursor over **Facility Management** located on the left side of the page, and then click on **Request Additional Facilities**.

![Facility Management Diagram]

A confirmation window will appear:

![Confirmation Window]

iii) Search for a site by entering the site address, name, or Global ID number issued by Water Board Staff and then click the **Search** button.

![Search Bar Diagram]

iv) Click inside the box to the left of the Global ID to select that facility. Then click the **Request Checked Facilities** button.

![Facility Selection Diagram]
Once access is approved by the State Water Board, RPs have the ability to approve access requests submitted by Contractors and Laboratories.

(v) To approve an access request from a Contractor or Laboratory, complete the following steps:

1. Under the Main Menu, on the left-hand side of the screen, scroll down to Facility Requests and select Pending Requests to view the users (contractors or laboratories) that have requested access to a specific facility. Check the box to the left of the appropriate user name(s) and then click Approved Checked Facilities. The user will now have ESI access to that facility.

vi) If the RP wants to remove an Authorized RP Agent’s, Contractor’s, or Lab’s ESI access to a site, the RP can go to the Facility Requests, select Approved Requests, check the box next to the user name (contractor or laboratory) to be removed, and then click the Revoke Access for Checked Facilities button.
vii) Alternatively, an RP may complete and submit a **Revocation Form** by email to geotracker@waterboards.ca.gov.

Click here to download the **Authorized RP Agent Revocation Form**. Or copy and paste the PDF Form link into your browser: http://www.waterboards.ca.gov/ust/electronic_submittal/docs/revoke.pdf
STEP 3: How to Create and Upload Field Point Names to Site

A. The FPN is a unique identifier that the RP (or Authorized RP Agents, Contractors, or Laboratory) assigns to a specific sample point (location) from which measurements are taken or samples collected (e.g. BASIN-1 [Detention Basin 1], MW-1 [Monitoring Well 1], B-1 [Borehole 1], etc.). FPNs must be created prior to uploading ESI Data. (Refer to the Important Notes section in Appendix C for additional details). An RP may choose to create and assign FPNs or approve an Authorized RP Agent, Contractor, or Laboratory to perform the task for them.

B. FPNs and well construction information can be added to a Global ID interactively by clicking on Edit Field Points, located under TOOLS in the left column, and then click on the facility’s name if it appears on the list or enter the Global ID and click Search. For existing sites with pre-existing FPNs in the system, this will display the current list of FPNs associated with the site.

C. There are two options for adding FPNs: Option 1 is for manually adding individual FPNs to a site and Option 2 allows for multiple FPNs to be uploaded all at once. Option 2 guidelines for creating FPNs are presented in Appendix C.

a) OPTION 1 - Click on ADD FIELD POINT NAME / WELL CONSTRUCTION (located at the upper left-hand side under the facility name and address).
b) Enter a new **FIELD POINT NAME**, select the appropriate **FIELD POINT CLASS** from the drop down list. (Note that field Quality Control [QC] selections [i.e. trip blank, equipment blank, etc.] are at the bottom of the drop down list.)

c) **It is highly recommended that all FPNs be limited to 10 or less characters to provide flexibility in your choice of laboratories.** Refer to the webpage [Frequently Asked Questions - Field Point Names](https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq5.shtml#fpn5.3) section for additional information on determining Field Point Names:

d) A **FIELD POINT** can be deleted from the list by clicking on the **X** located to the left of the **FIELD POINT NAME** then clicking **Save Changes**, only if there is no data yet linked to the Field Point. If data is linked to the Field Point the **X** will disappear.

- If data is linked to a Field Point that is to be deleted, the data will need to be transferred to another Field Point before the Field Point can be deleted. If the RP would like to change the name of the Field Point or transfer the data to another field point, they will need to contact the GeoTracker Helpdesk and request the change.
STEP 4: Upload (Submit) Data and Reports

An RP may choose to create and upload its own ESI data files and reports or assign an Authorized RP Agent, Contractor, or Laboratory to perform the task on their behalf. These instructions are for RPs to upload data should an Authorized RP Agent, Contractor, or Laboratory not perform this function.

An EDD or Electronic Data Deliverable can be either a data file such as an EDF, GEO XY, GEO Z, or GEO WELL, or a document file such as a GEO REPORT, GEO MAP, or GEO BORE. EDF stands for Electronic Deliverable Format and is an electronic version of a laboratory report. Data is formatted for ease of use by multiple parties and provides a consistent level of quality. An EDF data file is specific to analytical laboratory data. These data and document file types are defined in Appendix B.

Prior to uploading an EDF, GEO XY, GEO Z, GEO WELL data file, it should be checked for formatting errors using the data error checking tool, referred to as the Check EDD Tool. By request, most laboratories and surveyors can perform the EDF and the GEO XY data file error check, respectively. Guidelines to perform error checks on the EDF, GEO XY, GEO Z, and GEO WELL data using the Check EDD Tool are provided in Appendix D.

After the EDF, GEO_XY, GEO_Z, and GEO_WELL data files have been error-checked, the next step is to upload the files according to the instructions below.

For solutions to common ERROR messages during data upload, refer to the Frequently Asked Questions webpage for guidance: https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq7.shtml#incorr_fields7.1

A. Upload a GEO_REPORT File

GEO_REPORT is a paperless reporting requirement. A GEO_REPORT file is an electronic report submitted to the regulatory oversight agency in PDF format. A complete copy of all reports must be submitted to GeoTracker in PDF format. The uploaded PDF report may include the signed transmittal letter, professional certification and all data that are uploaded into GeoTracker. File size must not exceed 400MB. If the report exceeds 400MB, the report can either be (1) separated into multiple parts such as chapters, volumes, or sections so that each file submission is less than 400MB each; or (2) reduced in size using the Adobe Acrobat program.

For additional information please refer to the links provided in Section 3.0 Additional Resources.
INSTRUCTIONS FOR GEO_REPORT FILE UPLOAD

a) From any Select GEO_REPORT under Upload EDD located in the TOOLS menu. Enter the Global ID, select the Search button, and the facility will appear below the search fields. Select the facility name.

b) Start by clicking Browse in the UPLOADING A GEO_REPORT FILE window to select the report file for upload.

c) Locate the electronic file for the GEO_Report in the Browse window. Ensure the file to be upload is selected (the selected file name will appear in the File Name field near the bottom of the browse window), and then click Open. Doing so will close the browse window and return to the upload page.
d) Complete the fields in the **UPLOADING A GEO_REPORT FILE** page and click on **Upload File** to submit the report.

If the report is greater than 400MB in size, the report document must be split into two or more files to reduce file size to allow for upload. Repeat the step above until all of the parts are uploaded for a complete report. Contact the GeoTracker Help Desk for additional assistance: Geotracker@waterboards.ca.gov or call at 1 (866) 480-1028.

**B. Upload a GEO_MAP File**

**GEO_MAP** is an electronic image (PDF version) of a site map. The standard **GEO_MAP** submittal file is an electronic image of the stand-alone generalized site map for upload into the GeoTracker system. The **GEO_MAP** site map should include the following at minimum, if applicable:

- North arrow
- Map Scale
- Buildings/structure;
- Streets bordering the facility;
- Location of soil, water, wastewater, etc.
- Sampling/monitoring points;
- Location of any water supply wells within and/or adjacent to the property boundary; and
- Other useful information

A stand-alone version of the site map as a **GEO_MAP** should be submitted in addition to the electronic version of the written report (**GEO_REPORT**). Additional updated **GEO_MAP** site maps may be submitted at any time. For additional information please refer to the links provided in **Section 3.0 Additional Resources**. **GEO_MAP** site maps can be submitted in the following formats:

- PDF
- TIFF
- JPEG
- GIF

These files cannot exceed 400MB in size.
KMZ/KML files may also be uploaded. KMZ/KML files are used to indicate locations of items such as boundaries, plumes, source areas, excavation areas, operable units, and areas of interest. KMZ/KML specific upload fields appear on the upload screen only after a KMZ or KML file has been selected for upload.

- KML files cannot exceed 10MB in size
- KMZ files cannot exceed 3MB in size
- The "PNG" image file in a KMZ Image Overlay file cannot exceed 500KB

INSTRUCTIONS FOR GEO_MAP, KMZ, KML FILE UPLOAD

a) Select GEO_MAP/KMZ/KML under Upload EDD located in the TOOLS menu. Enter the Global ID, click the Search button, and the facility will appear below the search fields. Click on the Facility Name.

b) Select the file by clicking Browse then click Upload File to submit the file.

c) Locate the electronic file for the GEO_MAP in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the Browse window), and then click on Open. Doing so will close the Browse window and return to the upload page.
d) The file name will appear in the **UPLOADING A GEO_MAP** page. Click on **Upload File** to submit the **GEO_MAP**.

![Screenshot of Upload File page]

**C. Upload EDF Data Files**

EDF data files are laboratory analytical data files. The upload EDF function will allow the upload of laboratory data for one or more sites. Laboratories generally prepare the EDF files and provide them in a zipped file type format for their client to upload upon request. If the files have not been prepared for uploading, the user can perform the task by following the instructions in the [EDF Guidelines & Restrictions manual](https://www.waterboards.ca.gov/ust/electronic_submittal/docs/edf_gr_v1_2i.pdf). The file must be converted to a zip file format prior to uploading into GeoTracker. In Windows operating system, zipped files and folders work in the same fashion as normal (uncompressed) files. Several files may be combined into a single zipped folder to more easily share a group of files. For instructions on how to zip and unzip files, go to: [https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files](https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files)

For additional information please refer to the links provided in **Section 3.0 Additional Resources** for What is an “EDF”? or go to: [https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#edf6.2](https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#edf6.2)

**INSTRUCTIONS FOR UPLOADING AN EDF FILE**

Ensure the **EDF** is in a ZIP format. The **EDF** file can be converted to a Zip file using a program such as WinZip before uploading. For instructions on how to zip and unzip files go to: [https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files](https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files)
a) From the **TOOLS** menu, select **Upload EDD** then click on **EDF**. Select the **EDF file** by clicking on the **Browse** button and follow the steps shown below.

![Image 1](image1.png)

b) Locate the **EDF file** in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the **Browse** window), and then click on **Open**. Doing so will close the **Browse** window and return to the upload page.

![Image 2](image2.png)

c) Complete the required fields shown in the **UPLOADING AN EDF FILE** window and click on the **Upload File** to submit the EDF.

**NOTE:** The **EDF’s REPORT TITLE** and **REPORT TYPE** should normally be the same as the written report (GEO_REPORT) that it is associated with.
D. Upload a GEO_XY File

GEO_XY is locational data represented as latitude and longitude. If samples from permanent sampling locations are included in a report to a regulatory agency, these sampling points must be surveyed and uploaded as a GEO_XY data file. This would typically include any groundwater or similar monitoring points at the site or any drinking water wells that are included in the regulatory report. A “transient sampling point” (a point that is sampled for less than 30 days) or one-time sampling points (e.g. direct push technologies, piezometers, or grab samples often used for rapid site characterization, such as stockpile sampling points) do not need to be surveyed. Permanent influent/effluent sampling locations should also be surveyed.

For additional information please refer to Section 3.0 Additional Resources.

INSTRUCTIONS FOR GEO_XY FILE UPLOAD

A GEO_XY may be submitted as a fixed length or tab-delimited format including: ASCII *.txt file, Microsoft Excel Text (Tab delimited) (*.txt) file, or comma separated value delimited ASCII*.txt file (also known as "comma/quote delimited"). The file may be created first using a spreadsheet program, such as the Microsoft Excel spreadsheet program, and then converted to a Tab delimited.txt file.

Each line of the file should have the following fields, in this order:

- Global ID (REQUIRED)
- Field Point Name (REQUIRED)
- Field Point Class (REQUIRED)
- XY Survey Date (REQUIRED)
- Latitude (REQUIRED)
- Longitude (REQUIRED)
- XY Survey Method (REQUIRED)
- XY Datum (REQUIRED)
- XY Accuracy Value (REQUIRED)
- XY Survey Organization (REQUIRED)
- GPS Survey Equipment Type (REQUIRED)
- XY Survey Description (OPTIONAL)

IMPORTANT NOTE: For various data fields, GeoTracker will only accept data written in a certain format using valid values. Valid values are built-in codes required for certain fields such as datum and survey method. The reason for using specific values for these fields is to standardize data entry, to ensure data consistency, and to help prevent errors. Freely entered data might contain extra spaces, commas, or dashes that would make meaningful data manipulation and thorough or accurate data searches impossible. Most valid values are abbreviations of common or proper names; hence selecting the correct code is generally straightforward.

To search the lists of valid values go to:
http://geotracker.waterboards.ca.gov/searchvvl.asp

Latitude/Longitude data must be in decimal degrees with up to 7 decimal points. Measurements must be to +/-1 meter accuracy.

The file must be named GEO_XY.TXT.
Converting a GEO_XY Excel File to a Text (Tab delimited) File

a) Prior to converting a GEO_XY Excel file to a Text (Tab delimited) (*.txt) file, the header row (Row 1) must be deleted. Column headings are not allowed in the submitted text file.

Click here to see a GEO_XY Excel template file or go to:
https://geotracker.waterboards.ca.gov/esi/sample/GEO_XY.xls

Example of a GEO_XY Excel File with Header

b) With the GEO_XY Excel file open in the Excel program, select Save As from the File menu.

c) In the Save As window, select Text (Tab delimited) (*.txt) from the Save as type drop-down list.
d) Click the **Save** button and the Excel file will be converted.

Below is an example of the above Excel table (with the column header removed) after it has been converted to a Text (Tab delimited)(*.txt) file.

![Example of Excel table converted to Text (Tab delimited) file](image)

Converting a GEO XY Text (Tab delimited) File to a Zip File and Upload the File

a) The **Text (Tab delimited)(*.txt)** file must then be converted to a Zip file using a program such as WinZip before uploading. For instructions on how to zip and unzip files go to: [https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files](https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files)

With a completed ZIP file, it is time to upload. Select **GEO XY** under the **TOOLS** menu and **Upload EDD** subheading. Select **Browse** to look for the file.
b) Locate the **GEO_XY.zip** file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the **Browse** window), and then click on **Open**. Doing so will close the **Browse** window and return to the upload page.

c) Complete the required fields shown in the **UPLOADING A GEO_XY FILE** window and click on the **Upload File** to submit.
E. Upload a GEO_Z file

GEO_Z contains groundwater monitoring well elevation data and must be submitted for all permanent groundwater monitoring wells. Elevation measurements to the top of groundwater monitoring well casings are required for all groundwater monitoring wells (to be submitted as part of the GEO_Z file). If applicable, drinking water wells included in the report do not need to have the elevation reported unless they are identified as permanent sampling points.

For additional information please refer to the resource links provided in Section 3.0 Additional Resources.

INSTRUCTIONS FOR GEO_Z FILE UPLOAD

A GEO_Z may be submitted as a fixed length or tab-delimited format including: ASCII *.txt file, Microsoft Excel Tab Delimited*.txt file, or comma separated value delimited ASCII *.txt file (also known as "comma/quote delimited"). The file may be created first using a spreadsheet program, such as the Microsoft Excel spreadsheet program, and then converted to a Tab delimited.txt file.

Each line of the file should have the following fields, in this order:

- Global ID (REQUIRED)
- Field Point Name (REQUIRED)
- Elevation Survey Date (REQUIRED)
- Elevation (REQUIRED)
- Elevation Method (REQUIRED)
- Elevation Datum (REQUIRED)
- Elevation Accuracy Value (REQUIRED)
- Elevation Survey Organization (REQUIRED)
- Riser Height (OPTIONAL - Unless the monitoring well has been installed with a riser pipe above the ground surface)
- Elevation Survey Description (OPTIONAL)
- Effective Date (OPTIONAL)

IMPORTANT NOTE: For various data fields, GeoTracker will only accept data written in a certain format using valid values. Valid values are built-in codes required for certain fields such as datum and survey method. The reason for using specific values for these fields is to standardize data entry, to ensure data consistency, and to help prevent errors. Freely entered data might contain extra spaces, commas, or dashes that would make meaningful data manipulation and thorough or accurate data searches impossible. Most valid values are abbreviations of common or proper names; hence selecting the correct code is generally straightforward.

To search the lists of valid values go to:
http://geotracker.waterboards.ca.gov/searchvvl.asp

Elevation measurement should be from top of casing and reported relative to mean sea Level (MSL).

The file must be named GEO_Z.TXT.
Converting a GEO_Z Excel File to a Text (tab delimited) File

a) Prior to converting a GEO_Z Excel file to a Text (Tab delimited)(*.txt) file, the header row (Row 1) must be deleted. Column headings are not allowed in the submitted text file.

Click here to see a GEO_Z Excel template file or go to: https://geotracker.waterboards.ca.gov/esi/sample/GEO_Z.xls

Example of a GEO_Z Excel File with Header

<table>
<thead>
<tr>
<th>GLOBAL_ID</th>
<th>FIELD_PT_NAME</th>
<th>ELEV</th>
<th>SURVEY_DATE</th>
<th>ELEVATION</th>
<th>ELEV_METHOD</th>
<th>ELEV_DATA/AOE</th>
<th>VELEV_DATA/AOE</th>
<th>VELEV_SURVEY_ORG</th>
<th>FIBER_HT</th>
<th>ELEV_DESC</th>
<th>EFF_DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>100000100459</td>
<td>MW-1</td>
<td>10.4</td>
<td>06/19/17</td>
<td>88</td>
<td>0.3</td>
<td>SOLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100000100459</td>
<td>POINT 1-A</td>
<td>24.5</td>
<td>10/05/17</td>
<td>88</td>
<td>0.3</td>
<td>SOLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100000100459</td>
<td>LS-1</td>
<td>22.8</td>
<td>10/01/17</td>
<td>88</td>
<td>0.3</td>
<td>SOLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100000100459</td>
<td>POND-1</td>
<td>21.4</td>
<td>11/10/16</td>
<td>88</td>
<td>0.3</td>
<td>SOLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100000100459</td>
<td>SP-7</td>
<td>21.4</td>
<td>11/10/16</td>
<td>88</td>
<td>0.3</td>
<td>SOLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) With the GEO_Z Excel file open in the Excel program, select Save As from the File menu.

c) In the Save As window, select Text (Tab delimited)(*.txt) from the Save as type drop-down list.
d) Click the **Save** button and the Excel file will be converted.

Below is an example of the above Excel table (with the column header removed) after it has been converted to a **Text (Tab delimited)** (*.txt) file.

![Example of converted Excel table](image)

**Converting a GEO_Z Text (tab delimited) File to a Zip File and Upload the File**

a) The Text (Tab delimited) (*.txt) file must be converted to a Zip file using a program such as WinZip before uploading. For instructions on how to zip and unzip files go to: https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files.

With a completed ZIP file, it is time to upload. Select **GEO_Z** under the **TOOLS** menu and **Upload EDD** subheading. Select **Browse** to look for the file.
b) Locate the GEO_Z.zip file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the Browse window), and then click on Open. Doing so will close the Browse window and return to the upload page.

c) Complete the required fields shown in the UPLOADING A GEO_Z FILE window and click on the Upload File to submit.
F. Upload a GEO_WELL file

GEO_WELL is depth-to-water data. Groundwater monitoring wells must report the depth-to-groundwater information in the GEO_WELL file whenever the data is collected, even if the well is not actually sampled for other constituents during the sampling event. Drinking water wells generally do not need to have the depth to water reported unless they are surveyed as permanent sampling points. A permanent sampling point is defined as a point that is sampled for more than a 30-day period.

For additional information please refer to the links provided in Section 3.0 Additional Resources.

INSTRUCTIONS FOR GEO_WELL FILE UPLOAD

A GEO_WELL file may be submitted as a fixed length or tab-delimited format including ASCII *.txt file, Microsoft Excel Tab Delimited *.txt file, or comma separated value delimited ASCII *.txt file (also known as "comma/quote delimited"). The file may be created first using a spreadsheet program, such as the Microsoft Excel spreadsheet program, and then converted to a Tab delimited.txt file.

Each line of the file should have the following fields, in this order:

- Global ID (REQUIRED) - Needs to match the facility’s Global ID.
- Field Point Name (REQUIRED – Needs to correspond to FPNs used in the GEO_XYZ files.)
- Status (REQUIRED)
- Groundwater Measurement Date (REQUIRED)
- Depth to Free Product (OPTIONAL – unless free product is present)
- Depth to Groundwater Surface (REQUIRED FOR ACTIVE SAMPLING POINTS)
- Riser Height (OPTIONAL)
- Total Depth (OPTIONAL)
- Groundwater Measurement Description (OPTIONAL)

Measurement must be completed from the top of the well casing to the groundwater surface to the nearest +/-0.01 foot accuracy.

The file must be named GEO_WELL.TXT.

Converting a GEO_WELL Excel File to a Text (Tab delimited) File

a) Prior to converting a GEO_WELL Excel file to a Text (Tab delimited)(*.txt) file, the header row (Row 1) must be deleted. Column headings are not allowed in the submitted text file.

Click here to see a GEO_WELL Excel template file with column headings or go to: https://geotracker.waterboards.ca.gov/esi/sample/GEO_WELL.xls

Example of a GEO_WELL Excel File with Header

```
A   B   C   D   E   F   G   H   I   J
1 GLOBAL ID  FIELD POINT NAME  STATUS  GW MEAS DATE  DTFTPROD  DTW  RISER HT  TOT DEPTH  GW MEAS DESC SHEEN
2 110000010459  MW-1  ACT  12/1/2017  10.5  2.5  45.5
3
```

Page 26
b) With the **GEO_WELL** Excel file open in the Excel program, select **Save As** from the **File** menu.

c) In the **Save As** window, select **Text (Tab delimited)(*.txt)** from the **Save as type** drop-down list.

d) Click the **Save** button and the Excel file will be converted.
Below is an example of the above Excel table (with the column header removed) after it has been converted to a Text (Tab delimited)(*.txt) file.

Converting a GEO_WELL Text (Tab delimited) File to a Zip File and Upload the File

a) The Text (Tab delimited)(*.txt) file must be converted to a Zip file using a program such as WinZip before uploading. For instructions on how to zip and unzip files go to: https://support.microsoft.com/en-us/help/14200/windows-compress-uncompress-zip-files. With a completed ZIP file, it is time to upload. Select GEO_WELL under the TOOLS menu and Upload EDD subheading. Select Browse to look for the file.

b) Locate the GEO_WELL.zip file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the Browse window), and then click on Open. Doing so will close the Browse window and return to the upload page.
c) Complete the required fields shown in the **UPLOADING A GEO_WELL FILE** window and click on the Upload File to submit.

![Image of UPLOADING A GEO_WELL FILE window]

G. Upload a GEO_BORE File

**GEO_BORE** is an electronic image [PDF version] of the boring logs and well screen intervals. Boring logs must be prepared by an appropriate registered professional and need to be submitted in PDF format. If a monitoring well is installed, the screen depth and interval must be reported.

For additional information please refer to the links provided in **Section 3.0 Additional Resources**.

**INSTRUCTIONS FOR GEO_BORE FILE UPLOAD**

a) Select **GEO_BORE** under **Upload EDD** subheading located in the **TOOLS** menu. Enter the Global ID and click the **Search** button. The facility will appear below the search fields. Click on the facility same.

![Image of INSTRUCTIONS FOR GEO_BORE FILE UPLOAD]

b) Select the desired Field Point Name to upload the **GEO_BORE** file to.
c) Click **Browse** to look for the file to upload.

d) Locate the **GEO_BORE** file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the **Browse** window), and then click on **Open**. Doing so will close the **Browse** window and return to the upload page.

e) Enter the boring log/well log file name under **Report Title** then click **Upload File** to submit.
STEP 5: Delete an Electronic Submittal after Uploading

PENDING SUBMITTALS

An uploaded submittal may be deleted by the user that uploaded if its STATUS is still PENDING (i.e. the lead regulator hasn’t yet RECEIVED or DENIED it, nor has it been auto-received).

A. Under the Main Menu tab go to VIEW SUBMITTALS, click on By Facility, and then click on the facility name to display the full list of uploaded submittals for that Global ID. Or enter a Global ID in the search field and click search to view a particular facility.

B. Find the PENDING submittal be deleted and then click on the blue text DELETE SUBMITTAL located to the right of the submittal STATUS.
RECEIVED SUBMITTALS

Deleting or replacing a submittal after it has been RECEIVED by the regulator:

A. Deleting A Received Submittal: If the submittal has already been RECEIVED, contact the lead regulator and ask them to DENY it.

a) Replacing a received GEO_REPORT, GEO_BORE, GEO_MAP, or EDF submittal with an updated revised/corrected version: If a GEO_REPORT, GEO_BORE, GEO_MAP, or EDF submittal has been RECEIVED and it has been determined that it needs to be replaced with a revised or corrected version, the lead agency caseworker will need to DENY that submittal. The replacement file can be uploaded before the submittal appears as denied.

b) Replacing a received GEO_XY, GEO_Z, or GEO_WELL submittal with an updated revised/corrected version: If a GEO_XY, GEO_Z, or GEO_WELL submittal has been RECEIVED, needs to be replaced with a revised or corrected version, and the replacement contains the same survey dates or depth to water measurement dates as the previous version, the lead agency caseworker needs to DENY the previously RECEIVED submittal before the corrected replacement can be uploaded.
STEP 6: DENIED Electronic Submission Notification

A. When first logging onto GeoTracker, the first thing visible is the RECENTLY DENIED SUBMITTALS window. These are submittals that have been reviewed and DENIED by the lead regulator. If there are no denied submittals, the window will show “NO SUBMITTALS FOUND…”

B. When a regulator DENIES a submittal, they will include a DENIAL REASON. If the DENIAL REASON is unclear, contact the regulator and ask them to clarify. If additional assistance is needed in how to take care of the problem, contact the GeoTracker Help Desk: Geotracker@waterboards.ca.gov or call at 1 (866) 480-1028. Once the problem is addressed, you have the option hide your denied submittal by clicking on the “X” to the left of the CONF NUM (confirmation number).
3.0 ADDITIONAL RESOURCES

3.1 Contact the GeoTracker Helpdesk:

<table>
<thead>
<tr>
<th>Regulatory Requirement Questions</th>
<th>General Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact <strong>Hamid Foolad</strong></td>
<td>Contact GeoTracker Help Desk</td>
</tr>
<tr>
<td>Email: <a href="mailto:hfoolad@waterboards.ca.gov">hfoolad@waterboards.ca.gov</a></td>
<td>Email: <a href="mailto:Geotracker@waterboards.ca.gov">Geotracker@waterboards.ca.gov</a></td>
</tr>
<tr>
<td>Phone: (916) 341-5791</td>
<td>Phone: 1 (866) 480-1028</td>
</tr>
</tbody>
</table>

3.2 Online Resources

(1) **Electronic Submittal of Information Homepage:**

(2) **GeoTracker ESI Login:** https://geotracker.waterboards.ca.gov/esi/login.asp

(3) **Request ESI Login Password:**
https://geotracker.waterboards.ca.gov/esi/password1.asp

(4) **ESI Frequently Asked Questions:**
http://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq.shtml

   a. **Field Point Names – What is a Field Point Name?**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq5.shtml#f
   pn5.3

   b. **Uploading of Data and Reports**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#summarysteps6.1

   c. **Common ERROR Messages During Data Upload**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq7.shtml#in
corr_fields7.1

   d. **EDF - What is an EDF?**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#e
df6.2

   e. **Uploading a GEO_XY File**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#g
   eo_files6.7

   f. **GEO_Z File – What is a GEO_Z File?**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#g
   eo_files6.7

   g. **GEO_WELL File – What is a GEO_WELL File?**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#g
   eo_files6.7

   h. **GEO_BORE File – What is a GEO_BORE File?**
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#b
   ore_log6.13
i. **GEO_MAP File – What is a GEO_MAP File?**  
   https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#geo_map6.9

(5) **GeoTracker XYZ Templates are available here:**  

(6) **GeoTracker Database:** https://geotracker.waterboards.ca.gov/

### 3.3 Guidance Documents

   (https://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/docs/beginnerguide2.pdf)

(2) **GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions**. Revision 6.1, April 2005.  
   (http://www.waterboards.ca.gov/ust/electronic_submittal/docs/geotrackersurvey_xyz_4_14_05.pdf)

2.2 *Please note that the above referenced document contains some out-of-date links and “valid value” information. Please refer to the ESI Frequently Asked Questions (ESI FAQs) webpage for up-to-date information on how to look up valid values and other helpful information. Refer to the ESI Frequently Asked Questions webpage linked above.*

(3) **Electronic Reporting – Roles and Responsibilities**. January 16, 2013.  
   (https://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/docs/roles_responsibilities.pdf)


   (https://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/docs/geotrackersurvey_xyz_4_14_05.pdf)
APPENDIX A

FIGURE 1: START-UP TASKS

GEOTRACKER FACILITY ACCESS

Lead Agency: Provides database access to facilities Responsible Party (RP) has claimed.

RP: Provides Access to Authorized RP Agents, Contractors, Laboratories

RP & Authorized RP Agent: Accesses Facility to Upload Data and provide access to Contractors & Laboratories

RESPONSIBLE PARTY (RP)

Go to GeoTracker ESI Homepage & Request a Password

Claim Site(s)/Facility(s)

Agency Grants RP Access to Facility(s)

Perform the Following Tasks or Delegate to an Authorized RP Agent and/or Contractor:

Assign Field Point Names to Global IDs

Submit Samples to Laboratory

Error Check Electronic Data/ Lab Report - EDF

Upload Electronic Reports & Data Files

AUTHORIZED RP AGENT

Go to GeoTracker ESI Homepage & Request a Password

Claim Site(s)/Facility(s)

Agency Grants Auth RP Agent Access to Facility(s)

Assign Field Point Names to Global IDs

Submit Samples to Laboratory

Error Check Electronic Data/ Lab Report - EDF

Upload Electronic Reports and Data Files

CONTRACTOR & LABORATORY

Go to GeoTracker ESI Homepage & Request a Password

Request Access to Facility(s): RP or Auth. RP Agent Grants Access

Contractor: Submit Samples to Laboratory

Laboratory: Sends RP, Auth. RP Agent, or Contractor Lab. EDF Files

Contractor or Laboratory: May Error Check Electronic Data/ Lab Report - EDF

Contractor or Laboratory: Submits (Uploads) EDF Data & Reports
FIGURE 2: ESI SUBMITTAL PROCESS OVERVIEW AND DATA FLOW

- RESPONSIBLE PARTY (RP)
  - CONSULTANTS
  - CONTRACTORS
- LABORATORIES

Obtain Global IDs
Log-In To GeoTracker ESI or Request a Password
Request Access to Site
Obtain Approval
Add Field Point Names
Sampling Point IDs for:
- detention ponds
- lysimeter
- monitoring wells
Error Check Data
- Lab EDF data
- well location
- elevation
- depth to groundwater
Submit (upload) EDF Data & Reports
Reports may include:
- Technical Reports
- Work Plans
- Monitoring and Sampling Reports
- Laboratory Reports
- Final Sampling and Analysis Reports

(Note: There is a 48-hour delay period after upload until the submittal is received by lead agency caseworker or appears on GeoTracker. The 48-hour window allows the RP or consultant to re-access uploads for removal, edits, replacement, etc.)

Prepare Documents & Data
* Prepare Reports/Documents
* Prepare Bore & Well Logs (if applicable)
* Measure Well Screen Depths & Intervals (if applicable)
* Collect Samples (if applicable)
* Measure Depth to Groundwater (if applicable)
* Survey Monitoring Well & Locations & Elevations (if applicable)
* Prepare Site Map (part of a technical/annual report)

Format ESI Data
- GEO_XY (Location)
- GEO_Z (Elevation)
- GEO_WELL (Status, Depth to Water)
- GEO_MAP (Site Layout)
- GEO_BORE (Boring Logs)
- GEO_REPORT (Reports)

Submit Samples to Laboratory for Analysis
Laboratory Analyzes Samples

Receive ESI Data & Reports
[30 Day Period for Lead Agency Caseworker to Approve or Deny Submittal]

GeoTracker Database
ESI data & reports are stored in the GeoTracker database. Only approved data and reports by the lead agency caseworker are posted and accessible on the public GeoTracker website.

RP, Consultant, Contractor, Laboratory
Data Quality Assurance/Quality Control
APPENDIX B

B.1 INDIVIDUALS, ENTITIES, AND RESPONSIBILITIES

RESPONSIBLE PARTY (RP)
RPs have two primary electronic reporting responsibilities:

1. Claiming their site/facility(s) in GeoTracker (claiming means the RP (or their Authorized RP Agent [i.e. consultant] has obtained upload access to the RP’s site/facility); and

2. Uploading the required ESI compliance data and reports.

If the RP does not have internet access or does not wish to perform the electronic role of RP, they can choose not to create a GeoTracker RP account and can instead delegate the claiming and upload duties to a consultant acting as their Authorized RP Agent. Even if the RP chooses to create an RP GeoTracker account (i.e. an account with this user type of Responsible Party), and have claimed their site/facility, they still have the option to do the uploading themselves and/or have a consultant upload for them as their Authorized RP Agent and/or grant secondary access to Contractors and/or Laboratories so they too can upload information. RPs are ultimately responsible for ensuring submittals are uploaded in accordance with the facility’s requirements. Only RPs and Authorized RP Agents can grant secondary access to Contractors and Laboratories.

AUTHORIZED RP AGENT
The Authorized RP Agent (sometimes referred to as Auth_RP) is an individual or organization to whom primary electronic reporting responsibilities for a specific site/facility GLOBAL ID have been delegated by an RP who does not have Internet access or does not wish to perform the electronic online role of RP.

The consultant who acts as an Authorized RP Agent must have a GeoTracker account with a user type of Authorized RP Agent. The Authorized RP Agent consultant can use the same GeoTracker account to upload to multiple Global IDs for multiple RPs, but each request for access is handled separately. The Authorized RP Agent logs onto their GeoTracker account and requests access to the Global ID they need to upload to. The requested Global ID will be added to the Authorized RP Agent’s Pending Facilities List. Before the State Water Board grants the Authorized RP Agent access to a requested Global ID, the Authorized RP Agent needs to upload a completed Authorized RP Agent Authorization Form for each requested Global ID.

The Authorized RP Agent Authorization Form can be obtained in the Getting Started section on the public ESI webpage:


Should an RP choose to revoke an Authorized RP Agent’s existing access to their site, the RP will need to submit an Authorized RP Agent Revocation Form located under the Getting Started section. If additional assistance is needed in finding and/or requesting a site/facility, the GeoTracker Help Desk can be contacted via email at: geotracker@waterboards.ca.gov or via telephone at (866) 480-1028.

*Refer to STEP 1 Creating a Secure GeoTracker ESI Account and Logging In and STEP 2 Claiming Sites / Facilities in this guide for additional instructions.
**CONTRACTOR**
Consultants can be hired as Contractors by RPs and Authorized RP Agents to upload data and reports to GeoTracker. To do so, the Contractor must first have a GeoTracker account with a user type of Contractor. A single Contractor account can be used to upload to multiple sites having different RP and Authorized RP Agent clients or separate Contractor accounts can be established for each client. Before attempting to search for and claim a client’s site/facility Global ID, the Contractor should first ensure their client has already obtained upload access to (i.e. claimed) the Global ID. The first reason for doing this is that a Contractor can only find sites that have already been claimed by at least one RP or Authorized RP Agent. The second reason is that even if a Contractor is able to find a site in GeoTracker, they must be sure that their client has claimed it, since there might be more than one RP and/or Authorized RP Agent associated with the same site. If the Contractor’s client is not already associated with the site, but another RP or Authorized RP Agent is, the Contractor’s request to be associated with it will most likely not get approved since the other RP or Authorized RP Agent won’t be expecting the Contractor to request the site. After verifying their client has claimed the Global ID, the Contractor should log onto their GeoTracker account, use the Request Additional Facilities tool, and search for and request the Global ID. Once they have requested the Global ID, the Contractor should inform their client (RP or Authorized RP Agent); the RP then needs to log onto their own GeoTracker account and approve the Contractor’s request.

**LABORATORY**
The Laboratory is responsible for sample analysis and providing the RP, Authorized RP Agent, and/or Contractor with the analytical results in GeoTracker EDF format and in hard copy or electronic format for their client to use in their written report. Each laboratory must obtain a unique GeoTracker identifier called a LABCODE (https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq4.shtml#labcodeval4.1 ). Normally the laboratory error checks the EDF online using their GeoTracker account (https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq1.shtml#creatingaccount1.2 ) (user type “Laboratory”) but is not necessarily responsible for uploading the EDF to GeoTracker. Instead, the laboratory must forward the EDF to the RP/ Authorized RP Agent/Contractor who will review the files (e.g. to ensure the sample FPNs and site Global ID are correct) and then upload it into GeoTracker. Sometimes an RP or Authorized RP Agent wants the laboratory to upload the EDF data directly to GeoTracker. To upload EDFs directly using their “Laboratory” user type GeoTracker account, the laboratory must log onto their GeoTracker account and request access in the same manner as a GeoTracker Contractor. The request will then need to be approved by the RP or Authorized RP Agent client. Although not very common, sometimes, a laboratory needs to obtain upload access to a Global ID as an Authorized RP Agent rather than as a Laboratory. In that type of situation, the laboratory needs to create another GeoTracker account, and select Authorized RP Agent instead of Laboratory user type. The instructions for Authorized RP Agent will be followed to request upload access for that Global ID.

**STATE WATER BOARD STAFF**
State Water Board staff are responsible for the overall operation and maintenance of the GeoTracker system and its successful use by all entities involved with soil and groundwater contamination issues. The State Water Board is also responsible for approving RP and Authorized RP Agent requests for upload access to sites/facilities.
Further responsibilities of State Water Board staff include providing guidance and tools to standardize the review and quality of ESI data and reports submitted (i.e. uploaded) to GeoTracker and maintaining user accounts for RPs, consultants, and regulatory agencies.

**LEAD REGULATORY AGENCY CASEWORKER**

The lead regulatory agency caseworker reviews ESI compliance data and reports that have been submitted (i.e. uploaded) by (or for) the RP and either “receives” or “denies” submittals. The review procedure typically includes checking the Field Point Names in the EDF match the names used in the written report and other electronic submittals (GEO_XY, GEO_Z, GEO_WELL, GEO_MAP, and GEO_BORE). Once an ESI compliance submittal has been “received,” it becomes immediately available to the public on the public GeoTracker web site (https://geotracker.waterboards.ca.gov/).

The lead regulatory agency oversees the RP to ensure current and accurate data is uploaded to GeoTracker. The accuracy, completeness, and timeliness of the data are critical because:

1. The data are used by the public to understand the conditions of sites / facilities;
2. The data are used by the real-estate industry to assess the value of sites / facilities and surrounding property;
3. The data are used by the state and federal government to make decisions related to priorities and funding;
4. **Efficient use of GeoTracker** by lead regulatory agencies can increase overall effectiveness in managing their caseloads, and eases accessing and reviewing data and reports. Having all incoming and outgoing documents related to a cleanup site/facility included in GeoTracker makes them available to the public, other agencies, RP(s), and consultants who may work on the case;
5. **The regulator can effectively** track incoming documents by their due dates and receive reminders when a document is past due. GeoTracker assists in moving toward paperless case management;
6. The Office of Management and Budget, Congress, U.S. Environmental Protection Agency (USEPA) headquarters, and USEPA Region 9 to evaluate the effectiveness of various programs;
7. Lead regulatory agencies are requested to ensure that all their open cases are properly "claimed" by RPs (or, alternatively, by their Authorized RP Agents) and that ESI data and reports for open cases are being submitted regularly. Additionally, lead regulatory agencies are responsible for ensuring that the proper case status for each site / facility is correctly entered into GeoTracker and updated as the case status changes (e.g., assessment, remediation, closure).
B.2 IMPORTANT ESI TERMS DEFINED

LABORATORY ANALYTICAL DATA

Electronic Deliverable Format (EDF) is an electronic version of a laboratory report. Data is formatted for ease of use by multiple parties and provides a consistent level of quality. The GeoTracker EDF is specific to analytical laboratory data.

Analytical data (including geochemical data) for all soil, vapor, water, and leachate samples that are collected for the purpose of subsurface investigation, groundwater monitoring, or remediation are required to be submitted in EDF format to the GeoTracker system via the Internet.

Samples may include:
- monitoring well samples
- borehole samples
- gas and vapor samples
- groundwater grab samples
- piezometer samples
- stockpile samples
- leachate samples
- drinking water well samples

FIELD POINT NAME (FPN)

The FPN is the unique identifier that the RP (or their Authorized RP Agent, Contractor, or Laboratory) assigns to a specific sample point (location) where measurements or samples are taken, e.g. MW-1 (Monitoring Well 1), B-1 (Borehole 1), etc.

The FPNs normally match those used in the written report. Any discrepancies should be explained in the narrative.

BORING LOGS AND WELL SCREEN INTERVALS (GEO_BORE)

Boring logs and monitoring well information, such as screen intervals, are submitted as a GEO_BORE file. Boring logs must be prepared by an appropriate registered professional and submitted in PDF format. If a monitoring well is installed, the screen depth and interval must be reported.

DEPTH TO WATER DATA (GEO_WELL)

Monitoring wells need to have the depth-to-water information reported in the GEO_WELL file whenever the data is collected, even if the well is not sampled for any other constituents during the sampling event. Drinking water wells generally do not need to have the depth to water reported unless they are surveyed as permanent sampling points. A permanent sampling point is defined as a point that is sampled for more than a 30-day period.

GEO_WELL data should be submitted after every sampling event and provides depth-to-water field measurements data from groundwater wells for import into the GeoTracker system. GEO_WELL is a text file and must always be named GEO_WELL.txt. The file size must be reduced using a compressed (zipped) file feature prior to uploading into GeoTracker. In Windows operating system, zipped files and folders work in the same fashion as normal (uncompressed) files.

For instructions on how to zip and unzip files go to:
LOCATIONAL DATA (GEO_XY)
If samples from the permanent sampling locations are included in a regulatory report, these sampling points must be surveyed. This would typically include any groundwater or similar monitoring points at the site or any drinking water wells that are included in the regulatory report. The surveyed locational information for these sampling points should be submitted using the GEO_XY file. Transient or one-time sampling points (e.g. direct push technologies, piezometers, stockpile sampling points, or grab samples often used for rapid site characterization) do not need to be surveyed. Permanent influent/effluent sampling locations do not need to be surveyed. Transient sampling points (a point that is sampled for less than 30 days) are not required to be surveyed.

Each permanent sampling location's longitude (X) and latitude (Y) should be reported only once for a site unless resurveyed (a "permanent sampling location" is one that is sampled for more than 30 days). The longitude/latitude coordinates should be geographic, decimal degrees to 7 decimal places, NAD83 datum, to provides sub-meter accuracy horizontal location measurements data for import into the GeoTracker system. The GEO_XY file is a text file and must always be named GEO_XY.txt. The file size must be reduced using a compressed (zipped) file feature prior to uploading into GeoTracker. In Windows operating system, zipped files and folders work in the same fashion as normal (uncompressed) files. Several files may be combined into a single zipped folder to more easily share a group of files.

For instructions on how to zip and unzip files go to:

ELEVATION DATA (GEO_Z)
Elevation measurements to the top of groundwater well casings are required for all groundwater monitoring wells to be submitted as part of the GEO_Z file. Drinking water wells included in the report do not need to have the elevation reported unless they are identified as permanent sampling points.

Elevation data should be submitted every time a new survey is performed. The GEO_Z file is a text file and must always be named GEO_Z.txt. The file size must be reduced using a compressed (zipped) file feature prior to uploading into GeoTracker. In Windows operating system, zipped files and folders work in the same fashion as normal (uncompressed) files. Several files may be combined into a single zipped folder to more easily share a group of files.

For instructions on how to zip and unzip files go to:

The collection of information related to the exact location of groundwater wells, required by CCR, Title 23, Sections 2729-2729.1, constitutes "land surveying," as defined in section 8726 of the Business and Profession Code, and the collection of data is restricted to those who are licensed to practice land surveying in California. See the link below for additional information:
http://www.waterboards.ca.gov/ust/electronic_submittal/pe_ls_legal.shtml
Consumer-grade GPS units do not meet GeoTracker's sub-meter accuracy requirements (less than one meter). An online list of acceptable GPS units are available on the ESI webpage (https://www.waterboards.ca.gov/ust/electronic_submittal/index.html).

(Note: The same search can be done while logged onto a secured ESI account, see ESI Frequently Asked Questions number 6.15, How to lookup Valid Values [https://www.waterboards.ca.gov/ust/electronic_submittal/esi_faq6.shtml#lookup6.15]).

A GPS unit must be used that is either specifically listed or at least its general model series is listed on the GPS_EQUIP_TYPE list. If the general model series is listed, enter that valid value for GPS_EQUIP_TYPE and enter the actual unit used in the XY_SURVEY_DESC field. If the GPS unit or series is not on the list and you think it meets GeoTracker's accuracy requirements, email a request to the GeoTracker Help Desk, geotracker@waterboards.ca.gov and include either the manufacturer's specification sheet in electronic format (e.g. Adobe Acrobat) or a web link to the manufacturer's online specifications page. If the specifications meet GeoTracker requirements, Water Board staff will add a valid value for that GPS unit to the GPS_EQUIP_TYPE list of approved units.

SITE MAP (GEO_MAP)
An electronic generalized site plan map is required to be submitted into the State database (GEO_MAP). Site map should display tank locations, streets bordering the facility, and sampling locations for all soil, water and vapor samples. The site map is a stand-alone document that may be submitted in various formats. Additional updated site maps may be submitted at any time.

PAPERLESS REPORTING REQUIREMENT (GEO_REPORT)
Starting on January 1, 2005, a complete copy of all clean-up and monitoring reports must be submitted to GeoTracker. This uploaded PDF report may include the signed transmittal letter, professional certification, and all data that are uploaded into GeoTracker.

The survey data (latitude/longitude and elevation), depth-to-water, and site map information files must be submitted as required to the State Water Board's GeoTracker database via the Internet in accordance with the GeoTracker XYZ survey Guidelines and Restrictions (https://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/docs/geotrackersurvey_xyz_4_14_05.pdf).

ZIP FILE
A “ZIP” (a.k.a. “ZIPPED”) file is a file having file extension of “.zip” that has been compressed so it takes up less disk storage space. Because it is smaller in size from the original file, it takes less time to upload and download on the Internet. When a file is unzipped later (i.e. uncompressed or “extracted”), it is identical to the original.

Microsoft Windows has built-in capability to zip (compress) and unzip (uncompress). Search Windows “Help” for the word “zipped” to find instructions on how to zip/unzip files using your version of Windows' built-in zip/unzip capability.

A GeoTracker “zip” file should only contain one GEO text file or one set of EDF text files at a time. Do not include GEO and EDF files in the same zip file. The name(s) of the text files contained in the zip file must always be the name(s) specified for each type of submittal (e.g. must be “GEO_XY.txt” or “geo_xy.txt” and not “233BranchSt_GEO_XY.txt”).
The zip file itself can be named anything you want, e.g. “233BranchSt_GEO_XY.zip” or “GEOXY_233branch.zip”, “J34456_GEO_XY.zip”, etc.
APPENDIX C

Uploading Multiple Field Point Names (FPNs)

These instructions describe how to upload multiple FPNs using a tab delimited or comma delimited text file by clicking on UPLOAD FIELD POINTS / WELL CONSTRUCTION.

After clicking on FIELD POINTS/WELL CONSTRUCTION, the FIELD POINT UPLOAD INSTRUCTIONS link will appear to provide additional instructions on creating the text file.

Examples of a tab delimited text file versus comma delimited text file are provided below. The column headings must be removed for upload. It is up to the user to decide which text file is appropriate. Either form is acceptable.

<table>
<thead>
<tr>
<th>Tab Delimited File Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>T06000000001, MW-1, FACID01, Description for MW-1, MW, 10, 2</td>
</tr>
<tr>
<td>T06000000001, MW-2, , MW, 12, 3</td>
</tr>
<tr>
<td>T06000000001, MW-3, FACID01, MW, 9, 4</td>
</tr>
<tr>
<td>T06000000001, MW-4, BH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comma Delimited File Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>T06000000001,MW-1,FACID01,Description for MW-1,MW,10,2</td>
</tr>
<tr>
<td>T06000000001,MW-2,,MW,12,3</td>
</tr>
<tr>
<td>T06000000001,MW-3,FACID01,,MW,9,4</td>
</tr>
<tr>
<td>T06000000001,MW-4,,BH,,</td>
</tr>
</tbody>
</table>

To create the UPLOAD FIELD POINTS / WELL CONSTRUCTION file, open a text editor such as Notepad or a spreadsheet program, such as Microsoft Excel. Excel has a save-as option that will convert the file from a spreadsheet format to a text (tab delimited) file. Instructions are provided below.

- Enter Global IDs and Field Point Names in text editor program (See example below).
- Save as tab delimited file (for Microsoft Excel under file choose “save as” and for “save as type” choose “Text (Tab delimited”).
- Enter as many field point names/facilities as needed.
• Each line of the file should have the following fields, in this order:

 1. **Global ID** (REQUIRED) – The unique identifier for a regulated facility or site. This number is provided by Regional Water Board staff.

 2. **Field Point Name** (REQUIRED) - The field name or common name of the location where the field sample has been collected (i.e. Well 01). The FPNs should normally match those used in the written report (any discrepancies should be explained in the narrative).

 3. **Responsible Party Facility ID** (optional) - A facility or site code designated by the responsible party.

 4. **Field Point Description** (optional) - A description of the sampling location provided by the responsible party.

 5. **Field Point Class** (REQUIRED) – Code describing the type of “point” being sampled. Must be one of the listed valid values that can be viewed by clicking here: [listed valid values](https://geotracker.waterboards.ca.gov/searchvvl.asp).

 6. **Depth** (REQUIRED FOR WELLS) - The depth reported in feet from top of the casing to the beginning of the screened interval for a well.

 7. **Length of Screen in feet** (REQUIRED FOR MONITORING WELLS) - Length of screened interval reported in feet for a well

*DELETE COLUMN HEADINGS: All column headings must be deleted prior to uploading a tab or comma delimited text file.

### Example of an Excel file prior to conversion to a Tab (Delimited) file and removal of the column headings.

<table>
<thead>
<tr>
<th>GLOBAL ID</th>
<th>FIELD POINT NAME</th>
<th>RP FACID (OPTIONAL)</th>
<th>FIELD POINT DESCRIPTION (OPTIONAL)</th>
<th>FIELD POINT CLASS</th>
<th>DEPTH - TOP OF CASING TO TOP OF SCREEN</th>
<th>LENGTH OF SCREEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global ID #1</td>
<td>MW-01</td>
<td>RFPCACID#400</td>
<td>Groundwater Monitoring Well</td>
<td>MW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global ID #1</td>
<td>MW-02</td>
<td>RFPCACID#400</td>
<td>Groundwater Monitoring Well</td>
<td>MW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global ID #1</td>
<td>MW-03</td>
<td>RFPCACID#400</td>
<td>Groundwater Monitoring Well</td>
<td>MW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To upload the FPN tab delimited or comma delimited file, click on **UPLOAD FIELD POINTS/WELL CONSTRUCTION** located at the top and center of the **EDIT FIELD POINTS** tools option. Select the tab delimited or comma delimited file for upload by clicking on the browse button.
IMPORTANT NOTES: Before GEO_XY, GEO_Z, GEO_WELL, GEO_BORE, or EDF files can be uploaded, the FPN(s) must be uploaded first and appear on the Global ID’s list of FPNs. The FPNs used in GEO_XY, GEO_Z, GEO_WELL, and EDF uploads must match exactly how they are shown on the FPN list (e.g. MW-1 is NOT the same as MW1). Do not use commas, quotes, or apostrophes in the FPN. FPNs can be added interactively to a Global ID’s list of FPNs using “Edit Field Points” or uploaded as a text file.

If the lab provides an EDF file that uses FPNs different from the FPNs uploaded, for example MW1 instead of MW-1, a “Field Point Name (LOCID): is invalid” error will appear when the EDF is uploaded (note: LOCID [Location ID] is the early version of “Field Point Name”). DO NOT add the EDF’s FPNs to the Global ID’s list of FPNs as new versions of already existing FPNs. Instead, change the FPNs in the EDF so they match the existing FPN(s). Additionally, the laboratory can either correct the FPN errors, or they can be corrected manually.

The GeoTracker Help Desk is always available to assist with editing the EDF FPNs at 1-866-480-1028.

If no data has been uploaded (including GEO_BORE) to that sample location, the FPN can be modified to match the FPN provided by the laboratory using the “Edit Field Point” tool (at upper left, under “TOOLS”). Delete the existing FPN from that Global ID’s FPN list by clicking on the blue “x” to the left of the FPN (the “x” is only displayed when there is nothing uploaded yet to that FPN). Consistent FPNs must be used with the commencement of sample collection.

“Field Point Name (LOCID): is invalid” errors occur as a result of inconsistencies between the FPN associated with a Global ID and sample location information upon data upload. If the FPN is entered incorrectly on the Chain-of-Custody form (COC), the lab may enter it correctly when creating the EDF to prevent “Field Point Name (LOCID): is invalid” errors.

The FPNs must be consistent with the well names and borehole names used in the written report submitted to the lead agency caseworker. The lead agency caseworker will often reject EDFs where the FPNs do not match well names and borehole names in the written reports.
For additional information please refer to the links provided in Section 3.0 Additional Resources.
APPENDIX D

Error Checking A New Electronic Submittal of Information (ESI) Data File

An ESI data file should be checked for errors using the Check EDD tool prior to being uploaded. Data files that may be error checked include:

1) Laboratory Electronic Deliverable Format (EDF) data (i.e. lab analytical data)
   a) This may include EDF monitoring data from detention ponds, biosolids, or groundwater analysis, if applicable.

2) Sample location data:
   a) GEO_XY (latitude & longitude)
   b) GEO_Z (depth to groundwater)
   c) GEO_WELL (top of casing elevation)

3) Follow the EDF UPLOAD INSTRUCTIONS linked at the top center of the Check An EDF File window.

A. Checking an EDF File - To check the EDF data file for errors prior to uploading it, click on Check EDD under the TOOLS in the upper left of the screen.
(1) To begin, select the EDF data file that was prepared according to the upload instructions by clicking on the **Browse** button.

(2) Locate the **EDF.zip** file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the **Browse** window), and then click on **Open**. Doing so will close the **Browse** window and return to the **Checking an EDF File** page.

(3) Click the box **CHECK GLOBAL_ID AND FIELD POINT NAMES** to check the data for proper format and errors; click the box **USE GLOBAL_ID FROM EDF UPLOAD FILE** to link the Global ID in the file to the facility in the database; and then click the **Check File** button to run the error analysis. If an error is reported, correct the file error and check the file once more for errors before proceeding to upload the file in **STEP 4**.
B. **Checking a GEO_XY File** - To check the GEO_XY data file for errors prior to uploading it, click on **Check EDD** under the **TOOLS** in the upper left of the screen. Follow the GEO_XY UPLOAD INSTRUCTIONS linked at the top and center of the window.

1. To begin, select the GEO_XY data file that was prepared according to the upload instructions by clicking on the **Browse** button to find the file.

2. Locate the **GEO_XY.txt** file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the **Browse** window), and then click on **Open**. Doing so will close the **Browse** window and return to the Checking a GEO_XY File page.
(3) Click the **Check File** button to run the error analysis. If an error is reported, correct the file error and check the file once more for errors before proceeding to upload the file in **STEP 4**.

C. **Checking a GEO_ Z File** - To check the GEO_ Z data file for errors prior to uploading it, click on **Check EDD** under the **TOOLS** in the upper left of the screen. Follow the GEO_ Z UPLOAD INSTRUCTIONS linked at the top and center of the window.

(1) To begin, select the GEO_ Z data file that was prepared according to the upload instructions by clicking on the **Browse** button to find the file. Follow the steps provided below.
(2) Locate the GEO_Z.txt file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the Browse window), and then click on Open. Doing so will close the Browse window and return to the Checking a GEO_Z File page.

(3) Select the file then click the Open button and the file name will appear next to the Browse button. Click the Check File button to run the error analysis. If an error is reported, correct the file error and check the file once more for errors before proceeding to upload the file in STEP 4.

D. Checking a GEO_WELL File - To check the GEO_WELL data file for errors prior to uploading it, click on Check EDD under the TOOLS in the upper left section of the screen. Follow the GEO_WELL UPLOAD INSTRUCTIONS linked at the top and center of the window.
(1) To begin, select the GEO_WELL data file that was prepared according to the upload instructions by clicking on the **Browse** button to find the file. Find the steps provided below.

(2) Locate the **GEO_WELL.txt** file in the browse window. Ensure the file to be uploaded is selected, (the selected file name will appear in the File Name field near the bottom of the **Browse** window), and then click on **Open**. Doing so will close the **Browse** window and return to the **Checking a GEO_WELL File** page.

(3) Select the file then click the **Open** button and the file name will appear next to the **Browse** button. Click the **Check File** button to run the error analysis. If an error is reported, correct the file error and check the file once more for errors before proceeding to upload the file in **STEP 4**.