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1. WHAT IS GEOTRACKER? WHERE DO I START?

1.1 Definition

GeoTracker is a database and geographic information system (GIS) that provides online access to environmental data. It tracks regulatory data about leaking underground fuel tanks (LUFT), Department of Defense (DoD), Spills-Leaks-Investigations-Cleanups (SLIC) and Landfill sites. The database also contains information about public drinking water wells (due to the national security reasons, locations of the public wells are hidden from the unauthorized users). GeoTracker uses commercially available software to allow users to access data over the Internet. GeoTracker has public as well as secure pages or screens.

1.2 Getting a GeoTracker "USERNAME/PASSWORD"

GeoTracker requires a USERNAME and PASSWORD (the username/password pair is sometimes referred to as your "login") to gain access to the secure portion of GeoTracker in order to claim sites and upload data. If you are an RP, Authorized RP Agent, Contractor, or Laboratory, you can obtain a Username/Password at our webpage. We recommend you first review the "Establishing a Username" demo pages "for a step-by-step tutorial on how to obtain a Username/Password. To get to the demo, scroll down our webpage to the section "Getting Started" Click on:

- "Online Demo of Electronic Reporting"
- Choose "Establishing a Username"
- Once you have completed the "demo":
 - Go back to our webpage.
 - Scroll down again to "Getting Started" again
 - Click on "Login or Request a Password." (This will take you to the GeoTracker LOGIN PAGE)
 - Choose "Password Request."
 - Fill out the online form, being sure to choose the applicable "User Type."
 - Once you have completed and successfully submitted the online form, your
 Username/Password becomes effective immediately and you will be taken to the "Main
 Menu" page where you can click on "View/Add Facilities" and then "Request Additional
 Facilities" to search for and claim a site. You do not have to claim a site on your first visit. The
 next time you log onto GeoTracker you will be taken directly to the "View/Add Facilities" page.
 - Users may have more than one username/password (e.g. one as "Contractor" and another as "Authorized RP Agent"), but each username must be unique.

1.3 What is meant by the term "LOGIN"?

The term "LOGIN" refers to the Username/Password that you use to log onto the GeoTracker secure website.

1.4 What and where is the "LOGIN PAGE"?

The LOGIN PAGE is the webpage where a user enters their Username/Password to gain access to the secure portion of GeoTracker. It is also where new users can obtain a Username/Password and where users who have forgotten their password can find out what it is. The LOGIN PAGE for all users except Regulators and Water Agencies/Purveyors can be reached by going to our webpage at scrolling down to "Getting Started", and clicking on "Login or Request a Password."

2. FINDING FACILITIES / GLOBAL ID #S IN GEOTRACKER

2.1 What is a Global ID#?

The GLOBAL ID is the unique GeoTracker identifier for a regulated facility (site). A LUFT site (Leaking Underground Fuel Tank) GLOBAL ID begins with the letter "T" followed by a series of numbers. A UST (Underground Storage Tank) GLOBAL ID is normally shorter than a LUFT GLOBAL ID and normally contains only numbers. Landfills, SLIC and DOD sites also have unique Global ID #s that may start with "L", "SL" or "DOD" respectfully, followed by a series of numbers that are unique identifiers not meant to convey any information.

2.2 What is meant by the term "CLAIM" a site, facility or a Global ID?

The term "CLAIM" a site is synonymous with the terms "add" and "request". Before an RP (or Authorized RP Agent, Contractor, or Laboratory) can upload data to a site (Global ID) they must first "CLAIM" a site and become "ASSOCIATED" with the site.

To "CLAIM" a site, a user logs onto GeoTracker with their username/password and searches for the site using the "Request Additional Facilities" option.

If the site is found, the user places a checkmark in the "ADD" box to "CLAIM" the site.

If the user is an RP, the SWRCB will grant access after verifying their information.

If the user is an Authorized RP Agent, the user must send the SWRCB (via fax or regular mail) a completed "ELECTRONIC SUBMITTAL PASSWORD AUTHORIZATION FORM FOR CREATING CONSULTANTS AS AUTHORIZED RP AGENTS." This form is available on our webpage.

In the section "Forms." Click on "RP Authorized Agent: Authorization Form". The form is available in Adobe Acrobat PDF and Microsoft Word formats.

If the user is a Contractor or Laboratory, their request for access must be approved or denied by their RP or AUTHORIZED RP AGENT client (who must have already claimed and become associated with the site).

2.3 Facilities with multiple GLOBAL ID#s, which one to claim and upload data to?

First, check the "Status" column to see if only one of the GLOBAL IDs is an "open" case. Unless your Lead Regulator instructs otherwise, the "open" case would normally be the one you should claim and upload to.

To alert the regulator that there are multiple Global IDs (i.e. cases) for this site, you can use the "Report Duplicate" utility (instructions are available in "Delivering Data to the Internet (online demo)" on our webpage. If more than one GLOBAL ID has a status of "Open", then you'll have to perform some additional steps.

In addition to contacting your Lead Regulator for clarification as to which one to upload to, you can try looking up the Case Number (the Case Number should be referenced in correspondence you've received from the Lead Regulator) using the "Case Finder" tool on the main GeoTracker webpage.

If your Case Finder search is successful, you can determine the GLOBAL ID associated with that Case Number by clicking on "Locational Information". That's the GLOBAL ID you need to claim.

Log onto GeoTracker again with your username/password, choose "Request Additional Facilities," and this time search for that GLOBAL ID (leave everything else blank). Hint: if nothing is found, be sure you are not entering any letter "O"s instead of zeros and check to make sure there aren't any blank "spaces" after the Global ID (the cursor should be right up against the last digit).

If your Case Finder search is unsuccessful, you can use the "Site/Facility Finder" tool also located on the main GeoTracker webpage to do an address search.

- When entering "Site/Facility Finder" search criteria, it often works best to leave the "Business Name" blank.
- enter the "Street Number,"
- enter just the core portion of the "Street Name" surrounded by asterisks (e.g. "North Court Blvd" would be entered as "*court*" (without the quotes)), and
- enter the "City" (or leave "City" blank and
- enter "County" if you aren't sure about the "City" or if you want to widen your search).
- Then search.
- Your search results should list all cases for that site address.
- Click on "Report" for each listing in turn and note the Case Number (if present) at upper right;
- Compare it to the Case Number referenced in correspondence you've received from your Lead Regulator.
- Once you've found the correct Case Number, you can determine the GLOBAL ID associated with that Case Number by clicking on "Locational Information."
- Log onto GeoTracker again with your username/password,
- choose "Request Additional Facilities,"
- search for that GLOBAL ID (leave everything else blank) and
- claim it.

2.4 Changing a facility name in GeoTracker

For a description of how to do this, go to the "Online RP/Contractor Demo Pages" on our web page and choose "Submitting a Name Change."

2.5 Correcting a facility address in GeoTracker

If the address shown in GeoTracker is incorrect for a site, contact your lead regulator and tell them what needs to be changed. In the future, GeoTracker may add functionality enabling you to make changes yourself.

2.6 How do I get new permitted UST facilities into GeoTracker?

When GeoTracker was first set up all existing USTs that were already stored in existing databases were imported into GeoTracker. There is currently no way to easily enter more UST sites into GeoTracker, instead it has to be done manually one-by-one by our database programmers. We do hope to eventually provide a way for regulators to do so but I can't give you a timeframe for that. If it is absolutely necessary that you get these sites into GeoTracker's UST database, please let us know and our management will determine whether we have the funding available to enter them into GeoTracker.

3. Who is involved and what roles do they play?

3.1 Responsible Party (RP)

The Responsible Party (RP) is the owner or the operator of a facility who may be the party legally responsible for cleanup of an unauthorized release or the permittee for an operating site. The RP is legally responsible for submission of compliance data and the authenticity and accuracy of any electronic data submitted by individuals that they have authorized as their agent to have access to their site on the GeoTracker system.

The RP has two primary electronic reporting responsibilities:

- "Claiming" the sites they are responsible for and submitting electronic compliance data
- 2. Authorizing secondary access to allow a CONTRACTOR or LABORATORY to submit compliance data on their behalf for an individual site.

3.2 Authorized RP Agent

The Authorized RP Agent (Auth_RP) is an individual or organization to whom primary electronic reporting responsibilities for a specific site (GLOBAL ID) have been delegated to by a Responsible Party (RP) who does not have Internet access or does not wish to perform the electronic role of RP. The consultant who acts as an Authorized RP Agent must obtain a username/password as an Authorized RP Agent. This same username/password can be used to manage sites from various clients that you may have. Access for upload to a specific site (GLOBAL ID) is granted on a site-by-site basis. The Authorized RP Agent logs onto GeoTracker and "claims" the site(s) they need to upload to. When a site is claimed, it is added to the Authorized RP Agent's "Pending Facilities" list. Before the SWRCB grants the Authorized RP Agent full access to the site (i.e. before it is added to their "Associated Facilities" list), the SWRCB must receive via fax or regular mail a fully completed (including the RP's signature) "Electronic Authorization Form" for each site. You can obtain the form by going to GeoTracker Homepage, scrolling down to the section "Forms", and then to "Authorization Form". RPs may revoke this Authorization by signing and faxing or mailing the "Revocation" form which is available next to the Authorization form.

3.3 Contractor

Contractors are often hired by RPs and Authorized RP Agents to collect samples, perform groundwater measurements, survey locations and elevations and/or manage data for their facility or cleanup site. If their client wants them to, a Contractor can also upload data. To do so, the Contractor must first have a GeoTracker username/password as Contractor. Since a username/password can be used for multiple clients, the Contractor does not need to obtain more than one username/password. It is important that before attempting to search for and claim a client's site, a Contractor should first check with their client to verify that they have already claimed the site and are now associated with it. 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 is associated with it (there can be more than one RP and or RP Authorized Agent associated with a site). Otherwise, the Contractor's request to be associated with it will not get approved since other RPs or Authorized RP Agent won't be expecting the Contractor to request the site. Once the Contractor has verified their client is associated with the site, they should then log onto GeoTracker and, using "Request Additional Facilities," search for and claim (Add) the site. They should then let their client know right away so the client can log onto GeoTracker and approve the Contractor's request (the SWRCB does not approve or deny a Contractor's request for access).

3.4 Laboratory

The Laboratory is responsible for sample analysis and providing the RP, Authorized RP Agent, or Contractor with both a hard copy report and EDF formatted electronic data. Each laboratory must obtain a unique GeoTracker identifier called a LabCode. This code must be included in all EDF submittals to GeoTracker. The LabCode can be obtained by calling the Arsenault Legg EDF Help Desk at 1-800-506-3887. In some cases, the RP may wish to have the laboratory submit the EDF data directly to GeoTracker. To submit EDFs directly, the laboratory must first apply for a username/password as a Laboratory (if they do not already have one), log onto GeoTracker, and, using "Request Additional Facilities," search for and claim ("ADD") the site to their "Associated Facilities" list (see the above instructions for Contractor for more detailed instructions). Their request will be approved or denied by the RP or their Authorized RP Agent for that site. Typically, RPs do not want the laboratory to be responsible for directly uploading the EDFs to the GeoTracker system. Rather, the laboratory will 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) before submission to the GeoTracker system.

3.5 State Water Resources Control Board

The SWRCB is responsible for approving RP and Authorized RP Agent requests for access to sites (GLOBAL IDs). The SWRCB is also responsible for providing guidance to standardize and tools to upload the formatted electronic compliance data.

3.6 Lead Agency Case Worker (Regulator)

The lead agency caseworker or their delegate "receives" the electronic data. Normally, they verifying that the hard copy report has been received and that the FPNs in the EDF match the names in hard copy report. Once the data is "received" it is then moved into the GeoTracker archive database and made available to the public

3.7 Access to client's site by a CONTRACTOR or LABORATORY. What to do?

The following also applies to "<u>LABORATORY</u>" user type) A <u>CONTRACTOR</u> user type can only find sites that have already been "claimed" by at least one RP/AUTHORIZED RP AGENT.

If you are unable to find a site when logged in to GeoTracker, you can still determine whether or not the site is in GeoTracker by looking it up on the main GeoTracker webpage.

If you know the Case Number you can try searching for it using the "Case Finder" tool, and, if successful, you can determine the GLOBAL ID associated with that Case Number by clicking on "Locational Information".

Now that you know that the site is in GeoTracker and you know the Global ID, contact your RP/Authorized RP Agent client and ask them to go online and "claim" the site. Once your client becomes associated with the site, you, as a Contractor, should be able to log onto GeoTracker and find the site using "Request Additional Facilities" and then claim it by placing a checkmark in the "ADD" box.

After you've claimed the site, contact your client and ask them to go back online and "Approve" your request (the SWRCB does NOT approve/deny Contractor or Laboratory requests for access).

If your "Case Finder" search is unsuccessful, you can try searching for the site address using the "Site/Facility Finder" tool, also on the main GeoTracker webpage.

When using the "Site/Facility Finder" It often works best to leave the site name empty, enter the street number, enter the core portion of the street name surrounded by asterisks (e.g. "North Court Blvd" would be entered as just "*court*" (without the quotes)), and enter the city (or county if not sure about city).

Leave the other boxes blank and click on "Search". If your search turns up just one listing for that street address, you've probably found the site you need to claim.

Click on "Locational Information" to determine the GLOBAL ID. Some site addresses in GeoTracker have more than one GLOBAL ID. Normally, unless you are instructed otherwise by your Lead Regulator, you'll want to choose the one whose case "Status" is "Open."

If there are more than one "Open" status cases for a particular address, click on "REPORT" for each site in turn and note the Case Number (if present) in the upper right corner.

Compare that Case Number to the Case Number referenced in correspondence received from your regulator.

If the Case Numbers match, you've found your site.

Click on "Locational Information" to determine the GLOBAL ID. Then look under the Physical Location heading.

Now that you know that the site is in GeoTracker and you know the Global ID, contact your RP/Authorized RP Agent client and ask them to go online and "claim" the site. Once your client becomes associated with the site, you, as a Contractor, will be able to logon to GeoTracker and find the site using "Request Additional Facilities" and claim it by placing a checkmark in the "ADD" box.

After you've claimed the site, contact your client again and ask them to go back online and "Approve" your request (the SWRCB does NOT approve/deny Contractor or Laboratory requests for access).

3.8 Single vs multiple GeoTracker Accounts

A consulting firm may choose to have only one GeoTracker account name for all their employees. As long as the person on the Password Authorization form remains with the company they do not need to submit a revised form if a site is taken over by a new project manager. Company has the option of having separate GeoTracker accounts for different projects.

4. DATA COLLECTION AND APPLICATION OF VALID VALUES

4.1 What is a "LABCODE"?

The LABCODE is a unique code of up to four characters that identifies the analytical Laboratory that receives the samples (not necessarily the laboratory that performs the analyses).

The LABCODE can be obtained by calling ArsenaultLegg at 1-800-506-3887. If you get a voicemail message, just leave your contact info and they will get back with you shortly.

4.2 What is a "LOGCODE"?

The LOGCODE is a unique code of up to four characters that identifies the Field Organization responsible for collecting samples and related field data (i.e., environmental sampling information). The LOGCODE can be obtained by calling ArsenaultLegg at 1-800-506-3887. If you get a voicemail message, just leave your contact info and they will get back with you shortly.

4.3 What is a "SAMPID" and what is it used for?

SAMPID (Sample ID) is a field in the EDFSAMP, EDFTEST, and EDFFLAT files and is the identification assigned to a sample during collection in the field and as it appears on the chain-of-custody. SAMPID normally is the same as FPN, although it may be different (e.g. multiple depth samples and duplicate samples).

- How do I identify BOREHOLE samples?
- How do I identify HYDROPUNCH samples?
- How do I identify MULTIPLE DEPTH samples?
- How do I identify QC samples?
- How do I identify SOIL samples?

Naming of these Field Point Names is described in section 5.3.

4.4 How to report DUPLICATE samples?

Duplicate samples should be identified in the EDF file's SAMPID field by entering the SAMPID used for the non-duplicate plus the letters "DUP" (e.g. "MW-1DUP").

The FIELD POINT NAME for the non-duplicate sample and its duplicate should be the same.

4.5 How to Report STOCKPILE and COMPOSITE samples?

If the stockpile sample or composite sample (often collected from stockpiles or holding drums) laboratory analytical results are included in the hard copy regulatory report, then you must also submit them electronically to GeoTracker. To do so, you'll need to first upload FPNs.

Stockpile sample locations do not have to be surveyed but do need to be shown on the site map (see the document titled "Reporting Requirements" in the section "Electronic Reporting Overview" at the top of our webpage. Composite sample locations do not have to be surveyed nor do they have to be shown on the site map.

5. PRE-UPLOAD PROCESS OVERVIEW

5.1 Claiming and getting access to a facility in GeoTracker

- Obtain a USERNAME/PASSWORD
- Claim your Site(s)
- If CONTRACTOR, check with RP/Auth RP client to make sure they have already claimed the site.
- If <u>CONTRACTOR</u>, notify <u>RP/RP AUTH AGENT</u> client to go online and approve your request for access to the site
- If RP AUTH AGENT, be sure to write the GLOBAL ID on the "Authorized RP Agent
 Authorization Form", fill out the rest of the form, have the RP sign it, and fax or mail it ASAP to the
 address on the form
- Upload FIELD POINT NAME list
- Check EDDs (online error check). Fix any errors found (EDFs may need to be sent back to the originating Laboratory)
- Upload EDDs There is no specific order required. If you have an EDF ready to go, you can
 upload it prior to uploading GEO files. Make a record of the confirmation number.

5.2 Authorization form for RPs with multiple sites

If your RP client has many sites and they want you to be their authorized agent, then you can fill out just one copy of the Authorization Form and write "see attached" in the GLOBAL ID box. On the attached sheet(s), list all of the required information for EACH site. Also include yours and the RP's printed name, signature, phone number, and date (once per sheet).

5.3 What is a "Field Point Name (FPN)"?

- The FPN is a unique identifier the RP (or their RP Authorized Agent, Contractor, or Laboratory) assigns to a specific point (location) where measurements or samples are taken, e.g. MW-1 (Monitoring Well 1), B-1 (Borehole 1), etc.
- The FPNs should normally match those used in the hard copy report (any discrepancies should be explained in the narrative).

- Do not use spaces, commas, quotes, or apostrophes in the FPN. FPNs must be uploaded to a GLOBAL ID before uploading GEO_XY, GEO_Z, GEO_WELL, and EDF files. The FPNs used in GEO and EDF uploads must exactly match those previously uploaded in the FPN list (e.g. MW-1 is NOT the same as MW1).
- If a consultant receives an EDF file from the lab that uses FPNs that are slightly different from those already uploaded to the site (e.g. they used MW1 instead of MW-1), DO NOT upload additional FPNs to your site that match the lab's version, you need to modify one to match the other set. You can use a text editor to edit the EDF files (EDFSAMP & EDFTEST, or EDFFLAT) so the FPNs match, or you can ask the lab to redo them using the proper FPNs, or, if no EDD uploads have been made to this site yet (other than FPNs) you can delete the existing list of FPNs and then upload a new list containing the lab's version of FPNs. The important thing is to use the same ones from now on. To avoid this problem in the future, make sure everyone always uses the same FPNs for the site. Be sure the COC (chain of custody) that the lab receives with the samples properly identifies the sampling locations.
- The Field Point Names uploaded to GeoTracker must be the same as the well names and borehole names used in the hard copy report submitted to the lead agency caseworker. The SWRCB will reject EDFs where the field point names do not match well names and borehole names in the hard copy reports. The SAMPID field is the sample identification as listed on the COC. In many cases this will be identical to the entry in FIELD_PT_NAME.
- Depth Specific Sampling Do not upload separate FPNs for each sample depth! When samples are taken at multiple depths, the EDF files use the SAMPID field in conjunction with FPN to uniquely identify these samples. For soil samples, please upload a single Field Point Name for each borehole (e.g. B-1) and use the SAMPID field to identify the sampling depth in feet (e.g. B-1d5.0, B-1d10.0, etc.). For nested wells, each "well" should be entered with a separate Field Point Name (i.e. MW-1A, MW-1B, MW-1C). If depth discrete sampling is performed within a single groundwater well, please upload a single Field Point Name for the well (e.g. MW-1) and use the SAMPID field to identify the sampling depth in feet (e.g. MW-1d15.0, MW-1d20.0...).
- Field QC Samples For entry of field QC data in EDF, enter Field Point Names of QCTB for a Trip Blank, QCEB for an Equipment Blank, and QCAB for an Ambient Blank. To associate field QC samples with a specific well or borehole, one may append the Field Point Name to "QCEB" for a total of 10 characters in length. For example, if an equipment blank is taken at monitoring well MW-1, the Field Point Name for that equipment blank could be identified as "QCEBMW-1."

5.4 How do I add FPNs and well construction data?

The FPNs and well construction data can be uploaded as a non-zipped text file (click on the "upload field point names/well construction" link) or enter one FPN at-a-time on a data entry screen (click on the "Edit Field Points / Well Construction" link). Detail instruction on creating a FPN file can be viewed when you are logged onto GeoTracker by clicking on "Upload Field Points / Well Construction" and then "FIELD POINT UPLOAD INSTRUCTIONS."

5.5 When do I upload the FPNs?

You MUST upload the FPNs to a site (Global ID) prior to uploading any electronic file such as EDF, GEO_XY, GEO_Z, GEO_WELL, or boring log.

5.6 How do I change, delete or add a FPN?

Tip: If you are going to be modifying your FPN list, keep in mind that you can download the entire current list of FPNs using the "Download Field Point Names" option so you'll have a record of all of them before any changes are made just in case you need to refer to the original list.

You can edit an existing FPN's information but you cannot change its actual name. To change an existing FPN's name you need to first delete it, then add a new FPN with the desired name.

A FPN can be deleted, but only if there is no data currently uploaded to that FPN. Two methods are available for FPN deletion:

Method 1. From the "Edit Field Points / Well Construction" page (available when you are logged onto your account), you can delete any FPN having a small blue "x" to the left of its name. To delete, click on the blue "x" (be sure click on the right one since the FPN will be deleted immediately after clicking on the "x" without any warning message being displayed!). If the FPN you want to delete does not have a blue "x," you'll need to delete all pending submittals that reference that FPN. If submittals that reference that FPN have already been "received" by the regulator, you'll need to contact the Lead Regulator and ask them to retroactively "deny" the previously "received" submittals in order to delete the data submittals. Be sure you have archived copies of the data submittals being deleted because you'll need them to upload later. Once all data referencing a particular FPN has been deleted, you'll be able to delete that FPN. If necessary, you'll need to add a new FPN to replace the deleted FPN. You'll then have to edit the deleted submittal by changing all instances referencing the now deleted FPN to the FPN you want to use. Then re-upload the submittal.

Method 2. (Deletes all existing FPNs) If the option "DELETE FIELD POINTS" is activated (i.e. is blue) when a facility is displayed in your "View Associated Facilities," you can delete all of that facility's FPNs by clicking on "DELETE FIELD POINTS." The "DELETE FIELD POINTS" option is only activated when none of that facility's FPNs have uploaded data. If the option is not activated, you'll have to use Method 1 to delete FPNs.

You can add new FPNs to your existing list of FPNs by either uploading a new FPN text file containing only the new FPNs (the new FPN(s) will be appended to the existing list) or you can add new FPNs interactively online from the "Edit Field Points / Well Construction" page.

5.7 What is the Maximum field length for FPN?

The FPN can be up to 15 characters long with ONE exception: if your lab is creating EDF text files using "fixed length" format, then you MUST limit all of your FPNs to 10 characters maximum. The reason for this is that "fixed length" EDF files still use the original field length of 10 characters, so if the lab enters an FPN > 10 characters and saves it in fixed length format, it will be truncated to 10 characters. This will result in an error message when you try to upload your EDF since the truncated FPNs won't match the FPNs already uploaded for your site.

5.8 What is a "ZIP" file?

A ZIP (a.k.a. ZIPPED) file is a file that has been compressed so it takes up less disk storage space and, because it is smaller in size from the original file, takes less time to upload and download on the Internet. When a file is Unzipped (uncompressed or "Extracted") later, it is identical to the original.

To ZIP a file you need a program that is capable of Zipping (compressing) and Unzipping (decompressing) files. There are a number of programs available that can do this. WinZip is one that is available from www.winzip.com and is also sold by many retail stores that sell computer software. A WinZip "demo" version is downloadable from their website www.winzip.com and from many download sites such as:

- http://www.download.com/
- http://www.tucows.com/
- http://downloads-zdnet.com.com/2001-20-0.html

Upload only one GEO file or one set of EDF text files at a time. Do not include GEO and EDF files in the same zip file. The names of the text files contained in the zip file must always be as specified for that kind of file (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.

6. UPLOADING OF DATA AND REPORTS

6.1 Uploading Data - Summary of steps to upload data to a site

Detail steps on formatting data and reports prior to their uploads to the GeoTracker are given in various documents posted on the ESI website at:

http://www.waterboards.ca.gov/ust/cleanup/electronic reporting/index.html

In summary, in order to upload any data or report into the Geotacker, you need to:

- Chose a Username and Password pair and set up an account in GeoTracker
- Log-On and get access to the intended facility in GeoTracker
- Have your data/report prepared in the right format
- Upload your Field Point Name file using the upload link
- Error check your data using the "Check EDD" link
- Upload your data and/or reports, no specific order
- Record your confirmation #s
- Check your uploaded data/reports sitting under "Pending Status"
- Same account is often used to upload data/reports for various facilities.

6.2 What is an "EDF"?

"EDF", the Electronic Deliverable Format, is a comprehensive data standard designed to facilitate the transfer of electronic data files between data producers and data users. The format is specific to analytical laboratory data.

6.3 How do I create and upload an EDF?

The "Uploading EDF Data" demo pages describe how to upload EDF files (see "online demo of Electronic Reporting" at https://esi.waterboards.ca.gov/ab2886/demo/ in the section "Getting Started" on our webpage. For information about the formatting and structure of EDF files, see the section "Technical Information" on our webpage. We suggest that you first perform an online error check of your EDF submittal. If your EDF passes the error checker, you will be given the option to actually upload it.

6.4 Is there a specific name convention for EDF deliverable text files?

Yes there is.

EDF 1.2a, the historic EDF format, used an "NPDL" prefix for all of its files (i.e. NPDLSAMP.txt, NPDLTEST.txt, NPDLRES.txt, NPDLQC.txt, NPDLFLAT.txt, and NPDLCL.txt).

GeoTracker uses EDF 1.2i (a modified version of EDF 1.2a) which uses a naming convention prefix of "EDF" rather than "NPDL" (i.e. EDFSAMP.txt, EDFTEST.txt, EDFRES.txt, EDFQC.txt, EDFFLAT.txt, and EDFCL.txt).

The EDF text files are "zipped" (compressed) into a single "zip" file prior to submittal.

6.5 Where can I obtain the COELT program

The COELT installation program and users manual can be downloaded for free from ArsenaultLegg, Inc. http://www.arsenaultlegg.com/ (on the left, click on "Download"). Also, enABL, Inc. provides helpful free downloads at http://www.enabl.com/ (click on "Free Stuff").

6.6 Does vapor sample analytical data have to be included in EDF uploads?

Starting Jan. 1, 2005 all vapor or gas sample analytical data that one is required to submit to the regulatory agency must be submitted to GeoTracker in EDF format as well.

6.7 What are GEO XY, GEO Z, and GEO WELL files?

GEO_XY file: Provides sub-meter accuracy horizontal field measurements data for import into the GeoTracker system. Each fixed sampling location's longitude (X) and latitude (Y) for each groundwater monitoring well should only be reported once for a site unless resurveyed. The <u>GEO XY</u> file is a text file and must always be named "GEO_XY.txt". It must be "ZIPPED" prior to uploading into GeoTracker.

<u>GEO Z</u> file: Provides field elevation measurements data for import into the GeoTracker system. 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". It must be "ZIPPED" prior to uploading into GeoTracker.

GEO WELL file: Provides field measurements from groundwater wells for import into the GeoTracker system. GEO_WELL data should be submitted after every sampling event. The GEO WELL file is a text file and must always be named "GEO_WELL.txt". It must be "ZIPPED" prior to uploading into GeoTracker.

Note 1: The SWRCB has received a legal opinion from the State of California - State and Consumer Services Agency on behalf of the California Board for Professional Engineers and Land Surveyors as to the use of licensed professionals for collection of GeoTracker XY&Z data.

In summary, the collection of information related to the exact location of groundwater wells, required by Title 12, California Code of Regulations §§2729-2729.1, constitutes "land surveying," as the term is 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 "Board for Professional Engineers and Land Surveyors, Legal Opinion to SWRCB" in the section "Technical Information" on our webpage.

<u>Note 2:</u> Consumer-grade GPS units do not meet GeoTracker's submeter accuracy requirements (less than one meter). You can view an online list of acceptable GPS units by going to our <u>Electronic Submittal of Information page</u>.

- Scroll down to the section "Technical Information on Uploading Data"
- Click on "Valid Value Lists (VVL) for ESI"
- Choose "GEO XY"
- Choose "GPS_EQUIP_TYPE" from the "Field Name" dropdown list
- Click on "Search for Values"

You'll get a list of approved GPS units. You must use a GPS locating device that is listed on the "GPS_EQUIP_TYPE" list. If your GPS unit is not on the list and you think it meets GeoTracker's accuracy requirements, you must either supply the manufacturer's specification sheet in electronic format (e.g. Adobe Acrobat) or a web address for the manufacturer's online specifications page. If the specifications meet GeoTracker requirements, we will add that GPS unit to the list of approved units.

6.8 How do I create and upload GEO XY, Z, or WELL files?

Information about the formatting and structure of GEO files is available in the document "GeoTracker Survey_XYZ Guidelines & Restrictions" available in the "Technical Information on Uploading Data" section on our webpage. Microsoft Excel spreadsheet templates are available by clicking on "GeoTracker Survey XYZ Templates (MS Excel)".

Hint: Some of the GEO file fields are optional. To prevent receiving the error message "incorrect number of fields," the delimited text file MUST contain a delimiter for EACH field, whether or not it contains data.

If creating the text file directly in a text editor such as notepad, be sure to place one delimiter before each field in the table except the first one.

If using a spreadsheet program such as Microsoft Excel and you are leaving the last field empty, you must enter a "space" (i.e. hit the spacebar once) in each cell of the empty field before saving as a delimited text file. This will ensure Excel places a delimiter for the last field in the text file. Also, be sure to delete the top row containing the column names before saving as a delimited text file. In fields that require Valid Values, tables listing the acceptable Valid Values are provided in the above-mentioned "GeoTracker Survey_XYZ Guidelines & Restrictions". Before uploading your GEO text file, you must "zip" it using a program such as WinZip. To upload the "zipped" GEO file, log in to GeoTracker, choose "Upload EDD," and then choose the type of GEO file that you are uploading (we suggest you first perform an error check by clicking on "Check EDD").

6.9 What is a GEO MAP file

The GEO_MAP file is an electronic image of the generalized site plan map and is most often created by electronically scanning the hard copy report's site map.

The GEO_MAP should display locations of existing and former underground storage tanks, buildings, dispenser islands, streets bordering the facility, and sampling locations of all ground water wells and soil samples.

The GEO_MAP does not need to contain locations of composite samples (often collected from stockpiles or holding drums).

We don't recommend any specific software program to create a GEO_MAP. You can use any software program that can create a GIF, TIFF (TIF), JPEG (JPG), or PDF from a scanned image of your hard copy site map or, if the software you used to create your hard copy site map is capable of saving the file in one of the acceptable formats, that's fine too.

The GEO_MAP file must always be named "GEO_MAP" and should have the applicable file extension (.gif, .jpeg, .jpg, tiff, .tif or .pdf) and should NOT be "zipped" prior to upload.

6.10 Can I submit more than one GEO MAP to a site (GLOBAL ID)?

Yes, you may submit multiple maps per site.

6.11 Do old monitoring wells need to be surveyed?

If a well is still being sampled, it must be surveyed.

6.12 Can I make corrections or additions to an uploaded file?

If your submittal has not been "Received" yet, you can delete it and then resubmit a corrected version. For a description of how to do this, go to our online demo pages at "Delivering Data to the Internet (online demo)" on our webpage and choose "Deleting a Submittal".

If your submittal has already been "Received", you'll need to contact your Lead Agency Regulator and explain the situation to them. They can retroactively "Deny" a previously "Received" submittal. Once it is "Denied", you can upload the corrected version.

6.13 GEO BORE: The Bore Log File

The GEO_BORE file is an electronic image of the boring log for import into the GeoTracker system. Each boring log is associated with an individual sampling location where the borehole was drilled. The graphics of a boring log will vary, and may require more or less detail depending on the specific project. The boring log image is to be submitted in PDF format. To submit a GEO_BORE file, select "GEO_BORE" from the "Upload EDD" menu page and follow the instructions. A GEO_BORE file contains the bore log of only one FPN and is uploaded to that FPN (i.e. GEO_BORE files cannot be uploaded to multiple FPNs at once). An example boring log is available at: https://esi.waterboards.ca.gov/ab2886/sample/SampleBoringLog.pdf

6.14 GEO REPORT: The Electronic File of the Complete Report

The GEO_REPORT file is an electronic image of the complete report being submitted for regulatory review. Each GEO_REPORT is associated with an individual document type and title that is entered during the electronic submission process. A complete image of the report is to be submitted as a single PDF file. A complete electronic PDF version of the paper report shall include all text, graphs, diagrams, tables, maps, and figures that are included in the paper report. On July 1, 2005, the submittal of a complete copy of the report in PDF format into the GeoTracker system replaced submission of a paper copy of these reports. The electronic copy is intended to replace the need for a paper copy and is expected to be relied upon for all public information requests, regulatory review, and compliance/enforcement activities. The electronic report should contain a scanned copy of the signed report page

To submit a GEO_REPORT file, select "GEO_REPORT" from the "Upload EDD" menu page and follow the instructions. The document security setting for Geo_Report should not prevent a regulator from printing your uploaded report. Regulator may deny a non-printable report.

IMPORTANT: The GEO_REPORT PDF file must be less than 15MB in order to upload. Properly generated PDF files using current technology should average no more than 100KB per page of report while still retaining acceptable viewing clarity. For example, a 100 page report should be less than 10MB. We suggest that you use the PDF file size reduction tools provided by your PDF-creation software (be sure to retain a copy of your original just in case your reduced-size PDF results in unacceptable viewing clarity and you need to redo the size-reduction process using different reduction settings). If, for example, you are using Adobe Acrobat to create your PDF, we suggest that you first apply the "Reduce File Size..." option available from the vertical "File" dropdown list to your GEO_REPORT PDF file. Then choose "Advanced" from the overhead horizontal toolbar and then "PDF Optimizer...." From the "Images" tab choose "Bicubic down sampling to" and "150" pixels per inch for images above "225" pixels per inch and "JPEG" compression "Minimum" quality for both color and grey scale images. Choose "Bicubic down sampling to" and "300" pixels per inch for images above "450" pixels per inch and "JBIG2" compression "Lossy" quality for monochrome images. If further size reduction is needed, try "150" and "225" for "JBIG2" monochrome and/or try using the "Adaptive Compression" tool. For further information, the Adobe website provides the following PDF file-creation and size-reduction tip sheets:

PDF file-creation:

http://studio.adobe.com/us/tips/tip.jsp?p=1&id=101427&xml=acr7sdcombinepdf

PDF file size-reduction:

- For Acrobat 6
 - o http://studio.adobe.com/us/tips/tip.jsp?p=1&id=389&xml=acr6optimize
- For Acrobat 7
 - o http://studio.adobe.com/us/tips/tip.jsp?p=1&id=100681&xml=acr7optimize

Note: If the PDF file size cannot be reduced to less than 15MB, please split the file into parts or pages so that each file submission is less than 15MB.

7. COMMON ERROR MESSAGES DURING DATA UPLOAD

7.1 "Incorrect number of fields" (GEO files)

If you error message says "incorrect number of fields", it indicates that you have either too FEW or too MANY delimited fields per row in your text file.

If you are using a spreadsheet program such as Excel to create your table and are choosing to leave the optional field on the far right (i.e. the last field) of your table empty, it is important that you place a single "space" (i.e. hit the space-bar once) in each empty cell in that field. Excel will then know how many fields your table is supposed to contain and will provide the proper number of field delimiters in your text file.

To avoid having too many fields, it is important that you start with either a new, clean (blank) worksheet or a copy of the downloadable Excel template from our website. This will ensure that there are no unnoticed character-containing cells hiding on your worksheet that could cause Excel to add additional field delimiters or blank rows to your delimited text file.

7.2 "Value is not valid" (GEO files)

If you receive an error message saying a field value is not valid, you need to review the document "GeoTracker Survey_XYZ Guidelines & Restrictions" which contains the data dictionary and valid value lists for the GEO files. It is available as an Adobe PDF document on our webpage in the section "Technical Information on Uploading Data."

7.3 "Unspecified errors" (EDF file)

When you try to upload your EDF file, you may get an "unspecified" error message. You should click on "Please click here for more information about resolving these errors" to view a list of possible causes for such error message.

The most common cause is "The PARVAL field (in either the RES file or FLAT file) must not be left blank, and it must be a number."

To resolve this error, check the PARVAL field in every line (row) in your RES or FLAT file for either an empty PARVAL field or a non-numeric character (e.g. a quotation mark, an extra decimal point, etc.).

If you find no PARVAL error, then go to next most common error on the list, etc.

7.4 "Download Errors (Comma-Quote Delimited Files)" (EDF File)

When you see this message after trying to upload or error-check an EDF file, click on the message's text "Download Errors (Comma-Quote Delimited Files)" to download a "zip" file named "errors.zip." The "errors.zip" file contains comma-quote delimited text files which list errors found in each of the EDF files. The actual error description appears at the end of each row (line). Note: Even though you may have uploaded your EDF in FLAT format, the error text files will always be provided in the RELATIONAL format (i.e. SAMP, TEST, RES, QC, CL).

7.5 ERROR MESSAGE: "this file is not a zip file"

Your EDF and GEO text files must be "zipped" using a file compression program such as WinZip before uploading. The "zip" file name MUST have a ".zip" file extension.

7.6 ERROR MESSAGE: "invalid global ID/field point name"

Be sure you have already uploaded all of the Field Point Names (FPNs) to the site (Global ID).

Check that the file you are trying to upload contains the correct Global ID and the FPNs exactly match those in the FPN list already uploaded to the site.

If the file you are trying to upload is a delimited text, be sure there's no extra space after the GLOBAL_ID's last digit, or the Field point name's last character.

An extra space is not visually apparent when viewing a tab delimited text file, but it is treated as part of the GLOBAL_ID or Field point name by GeoTracker.

An extra space can be present if you used your mouse to copy the GLOBAL_ID or Field point name from another source and inadvertently included a space after the last digit in the copied text, and then pasted it into your spreadsheet or text file.

You can check for a space by placing your cursor just to the right of the last GLOBAL ID digit or Field point name character and use the right arrow key to see if the cursor immediately tabs over to the next field or if it first moves over a blank space before tabbing over.

If the file you are trying to upload is an EDF in "fixed length" format, FIELD POINT NAMES longer than 10 characters are truncated to 10 characters. FIELD POINT NAMES can be up to 15 characters in all types of files except fixed length EDFs.

8. REGULATORS' ROLES AND RELATED ISSUES

8.1 Regulator screens, managing cases and receiving of ESI data.

There are certain screens and pages in GeoTracker that are accessible only by a Regulator. There are certain tools and links on these screens that enable regulators to perform their daily work such as managing cases, reviewing and receiving electronic data, and communicating with their clients. Regulators need to establish a Username/Password to get access to these screens. Tutorials on using Regulator pages are available at "Help/Tutorials" link under "Regulator Tools".

8.2 How do I obtain a Regulator's Username / Password

If you are a REGULATOR, you can obtain a <u>Username/Password</u> by going to <u>http://geotracker.waterboards.ca.gov/password</u>.

Once you have your Regulator Username/Password, the LOGIN PAGE is https://geotracker.waterboards.ca.gov/regulators (note: "https", NOT "http").

8.3 As a Regulator, how do I relocate a site in the GeoTracker?

The tutorials' link under the regulator tools provides 7 steps in relocating a LUFT site. These steps can be viewed at: https://geotracker.waterboards.ca.gov/regulators/help/movesite.asp

There is also a <u>tutorial</u> that was originally created to show Water Agencies/Purveyors how to use GeoTracker's "Relocation Tool" to move the location of their water wells.

The last page of the tutorial provides links for Water Agencies/Purveyors to log in or obtain a new username/password.

Regulators log in at: https://geotracker.waterboards.ca.gov/regulators

- Once you are logged in to GeoTracker as a Regulator:
- Choose the menu item "Move Sites",
- Then search for the site you want to move.
- Once you've found your site, note the column "Data Source".
- If it says "ETAK" that means the site was located using Address Geocoding which is sometimes highly inaccurate (note the "Estimated Accuracy").
- The GeoTracker map displays you'll see will be similar to those you saw in the demo.
- You can Zoom In and Out, Pan, etc.... The "Select Action" drop-down list above the map window is where you choose the "Mark Location" tool.
- If you don't like where the red "X" appears, you can use "Mark Location" repeatedly until you are satisfied with its location.
- If the present site location is way off from where it should be, the map display extent may not be large enough to include the location where you want to move it to.
- If so, you can Zoom Out (click on the "Zoom Out" button, then click on the map where you want to recenter the Zoomed Out view) until you can also see where you want to move the site to, then use the "Mark Location" tool to place the red "X" on its approximate new location.
- Then Zoom In (click on "Zoom In" and click on the red "X" to re-center the Zoomed-In map display on the red "X").
- Once you are Zoomed In you can make finer location adjustments using the "Mark Location" tool.
- Note that once you've "Saved" your new location, the change usually does not show up on GeoTracker until the following business day.

9. MISCELLANEOUS

9.1 Is there a "log out" button on the GeoTracker site. Is it strictly on a timed-out basis?

There is no official "logout" button for our site but there is a time-out feature. The default timeout for Regulators and RP/Consultants is 4 hours. One way to ensure you are "logged off" when you are done with an online GeoTracker session is to close down your browser program and then restart it before going to another website.

9.2 What is the distinction between search queries run for LUFTs and USTs sites?

Assuming when you say "Fuel Tank" you actually mean LUFT site (Leaking Underground Fuel Tank). The LUFT and UST databases were created and are maintained totally separate from each other. Although the list of LUFT sites is technically a subset of all USTs, this is not actually the case in GeoTracker. There are many instances where a site was first entered into the GeoTracker system as a

contaminated site (i.e. as a LUFT site) but may not have been entered yet into the UST database. The LUFT database is far more comprehensive and up-to-date than the UST database, thus the number of LUFT sites far exceeds the number of USTs.

9.3 Are we required to upload work plans if they have no data associated with them?

All reports including the work plans that are submitted to your local agencies need to be uploaded into the GeoTracker in PDF.

9.4 Is the time spent uploading data/reports to the GeoTracker reimbursable by the fund?

Yes, as long as it reasonable, the cost associated with uploading required data and reports into the GeoTracker for the LUFT sites are reimbursable by the cleanup fund.

9.5 Access to GeoTracker by Water Agency (Purveyor)

The brief tutorial located at http://www.geotracker.waterboards.ca.gov/wdemo/ answers the following questions:

- How do I get a username/password?
- Where's the login page once I have my username/password?
- How do I move one of my well locations in GeoTracker?