State of Florida

State Emergency Response Commission

For Hazardous Materials

Hazard Analysis How-To-Guide

Updated in partnership: Florida Division of Emergency Management and the Statewide Hazard Analysis Working Group.

Rev. July 2023

Contents

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Acronyms

CAMEO	Computer-Aided Management of Emergency Operations
EHS	Extremely Hazardous Substance
EM	Emergency Management
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FDEM	Florida Division of Emergency Management
LEPC	Local Emergency Planning Committee for Hazardous Materials
SERC	State Emergency Response Commission
SOD	Statement of Determination
TPQ	Threshold Planning Quantity
VZ	Vulnerability Zone

Executive Summary

The Hazard Analysis program is designed to give planners the opportunity to verify information on Section 302: Extremely Hazardous Substances (EHS) submitted into the state Tier II reporting system (E-Plan: erplan.net) for Emergency Planning and Community Right-to-Know Act (EPCRA) compliance.

This how-to guide details the requirements necessary to complete the Hazardous Analysis (HA) Grant Agreement Tasks & Deliverables issued by The Technological Hazards Unit located in the Response Bureau of the Florida Division of Emergency Management (FDEM). Beginning with an overview of the HA Grant Agreement Scope of Work followed by in-depth, step-by-step instructions to outline the Hazards Analysis process – from scheduling a site visit (SV) (pre-assessment meeting), gathering a facility's Tier II Report information from E-Plan, conducting the site visit (assessment), completing the post assessment, and finally, creating the HA CAMEO Data Manager file (hazards identification, vulnerability analysis, and risk analysis, etc.).

The Environmental Protection Agency, the Florida Division of Emergency Management, a Microsoft Office product, or basic software available on any computer, provide all software used in this guide. This how-to guide uses software considered "basic" or free to acquire. Numerous software programs can be used to complete the steps outlined, but the contract can be completed using any software or program the assessor prefers.

It is recommended that the Hazard Analysis Agreement is accessible to the assessor while using this guide. Any reference to 'Attachment' refers to a specific attachment of the contract. Examples of some attachments are included as a visual reference. All samples included are image files and will not print correctly. Therefore, the assessor should retrieve the actual attachment from the contract to complete.

Contact the FDEM grant manager with questions about completing the Hazard Analysis Agreement.

Contract Overview:

The Hazard Analysis Agreement is issued by the Florida Division of Emergency Management (FDEM) by July 1st of every year to a local emergency management (EM) office or to the staffing agency for the Local Emergency Planning Committee (LEPC). The Hazard Analysis program is designed to give planners the opportunity to verify information on Section 302: Extremely Hazardous Substances (EHS) submitted into the state Tier II reporting system (E-Plan: erplan.net) for Emergency Planning and Community Right-to-Know Act (EPCRA) compliance.

EPCRA was created to protect communities from the health and environmental hazards associated with hazardous chemicals. Under Section 312 of the Act, regulated industries must file an annual Tier II report with the SERC, LEPC, and local fire department for hazardous and/or extremely hazardous substances stored, used, or manufactured on site for more than a 24-hour period at any time during the previous calendar year. The deadline for filing a Tier II report for the previous year is March 1st.

The Hazard Analysis Agreement is split into 3 individual deliverables throughout the year, all of which need to be uploaded into the FDEM SharePoint for approval.

Deliverable 1: Due December 1

Provide completed CAMEO Data Manager files for 25% of facilities listed in Attachment H, and upload into the FDEM designated SharePoint folder.

- Provide a list identifying the names of facilities submitted in the Deliverable. Identify the facility name, SERC number, site visit date, SOD, and notes on special circumstances when applicable.
- Upload completed Attachment K Forms, and Attachment L Forms (when applicable) to Salesforce.
- Upload Attachment I Financial Invoice Form to Salesforce and request payment following deliverable review and approval. This is not subject to the deliverable due date.

Deliverable 2: Due April 1

Provide completed CAMEO Data Manager files for 25% of facilities listed in Attachment H, and upload into the FDEM designated SharePoint folder.

- Provide a list identifying the names of facilities submitted in the Deliverable. Identify the facility name, SERC number, site visit date, SOD, and notes on special circumstances when applicable.
- Upload completed Attachment K Forms, and Attachment L Forms (when applicable) to Salesforce.
- Upload Attachment I Financial Invoice Form to Salesforce and request payment following deliverable review and approval. This is not subject to the deliverable due date.

Deliverable 3: Due June 1

Provide completed Hazards Analysis (HA) (CAMEO Data Manager zip file) to the Local Emergency Planning Committee (LEPC) (if applicable) and provide FDEM with notification of transmittal.

• Notify first responders and Attachment H facilities of the availability of HA information and provide the FDEM Grant Manager with the notification of transmittal.

• Upload the final "approved" CAMEO Data Manager zip file into SharePoint. Use naming convention (County name, Final HA, Year).

• Upload Attachment I Financial Invoice Form to Salesforce and request payment following deliverable review and approval. *This is not subject to the deliverable due date**.***

Deliverable 4: Due within 30-days of HA agreement completion

Deliverable 4: Upload completed Attachment M Close-Out Report Form to Salesforce.

Agreement Closeout

To close out the Hazard Analysis agreement, a close-out report (Attachment M) needs to be sent to the FDEM Grant Manager no later than 60 days after the contract termination.

Remember: <u>Complete only 50% of your entire Section 302 EHS List each Grant year.</u>

- ***Deliverable 1:*** Draft CAMEO zip file uploaded to FDEM SharePoint for 25% of Section 302 EHS Facilities
- ***Deliverable 2:*** Draft CAMEO zip file uploaded to FDEM SharePoint for 25% of Section 302 EHS Facilities
- ***Deliverable 3:*** Approved CAMEO file and corresponding letter sent to LEPC or EM office, notification letter sent to facilities and approved CAMEO zip file(s)uploaded to the FDEM SharePoint.
- ***Deliverable 4:*** Upload completed Attachment M Close-Out Report Form to Salesforce.

Scheduling a Site Visit:

Scheduling the site visit can be the most beneficial part of completing a CAMEO assessment. The scheduling of a site assessment is the easiest time to verify all aspects of the facility's submitted Tier II report and is recommended to be completed via phone. While on the phone, have the facility's Tier II report and verify the information in each section. Doing this simple step will make the CAMEO file easier and more accurate. There is no set time for how long a site visit should take. It will vary based on size and chemicals at the facility.

Tier II reports in the E-Plan system are organized by three sections.

1. **Facility Information:** Contains Facility name, Company, Initial Filing Year, Address, Latitude, Longitude and SERC number.

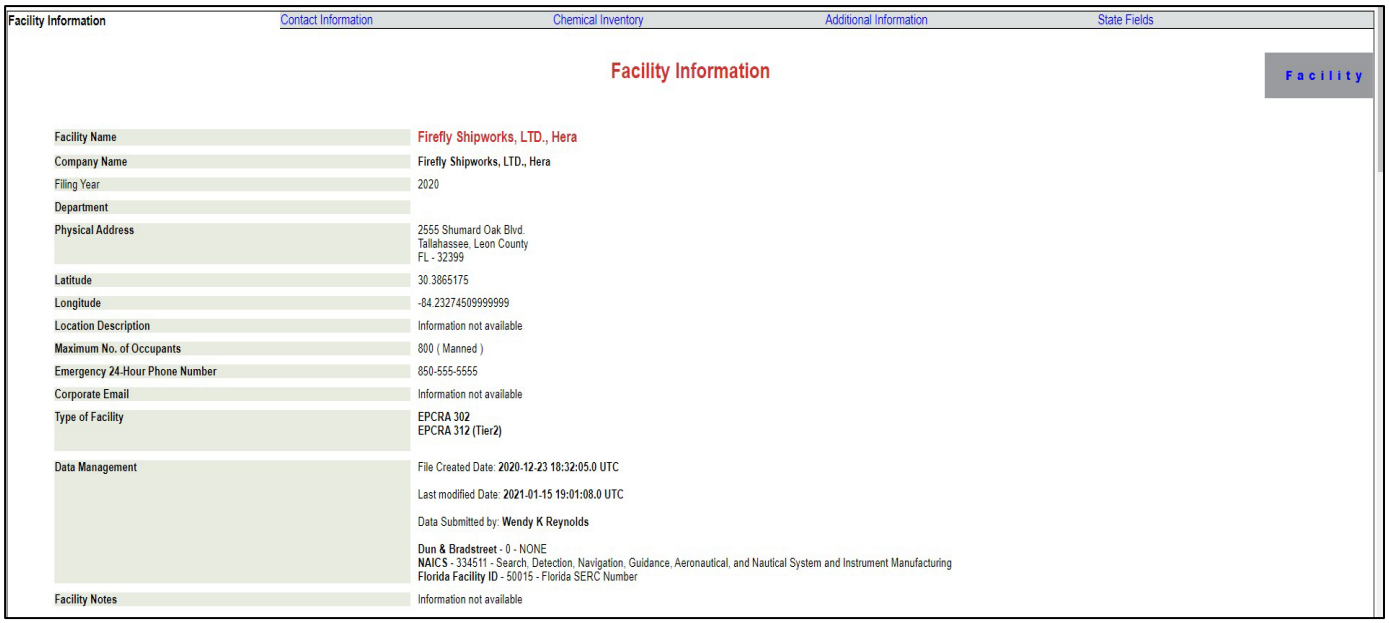


Figure 1: Facility Information

2. **Facility Contact Information:** The Tier II report should have a Primary Contact, Secondary Contact, and a facility 24-hour emergency number.

Facility Contact Information

Name	Contact Type	Phone	Email
Malcolm Reynolds	Emergency Contact	**Work** - 850-555-5555 **24-hour** - 850-555-5500	m.reynolds@alliedspacecraftcorp.com
Zoe Washburn	Fac. Emergency Coordinator	**Work** - 850-555-5555 **24-hour** - 850-555-5555	zoe.w@alliedspacecraftcorp.org
Firefly Shipworks, LTD., Hera	Facility Phone	**FP** - 850-555-5555	
Allied Spacecraft Corporation	Owner / Operator	**Work** - 850-555-5555	operations@alliedspacecorp.com
Kaylee Frye	Tier II Information Contact	**Work** - 850-555-5555	kaylee.f@alliedspacecraftcorp.com

Figure 2: Facility Contact Information

3. **Chemical Inventory Information:** Chemical name, CAS #, Max Qty., Avg Daily Qty, max container size. <u>*All quantities and amounts are in pounds (lbs.).</u>

Chemical Inventory Information

View 312 Chemicals | View All Chemicals

EPCRA 312 Chemicals

Chemical (Click for ERG link)	CAS #	Max Qty. (lbs)	Avg Qty. (lbs)	Max Amount in largest container (lbs)	NFPA Code H R S	Properties	Fact Sheets
Ammonia (anhydrous) (EHS Chemical) Show Chemical Plume	7664-41-7	18,000	18,000	18,000	3 1 0 -	Pure Liquid Gas EHS	SDS MSDS Profile CHRIS

Physical Hazard: Flammable (gases, aerosols, liquids, or solids); Gas under pressure (compressed gas)

Health Hazard: Acute toxicity (any route of exposure); Serious eye damage or eye irritation; Respiratory or skin sensitization

Synonyms: Am-fol;Ammonia;Ammonia (anhydrous);Ammonia (anhydrous) (liquefied);Ammonia, [anhydrous];Ammonia, anhydrous;Ammonia, anhydrous, liquefied;Ammonia gas;Ammonia solution, with more than 50% ammonia;Ammonia-14n;Ammoniac, anhydre (dot french);Ammonia;

Figure 3: Chemical Inventory Information

The information in these three sections of the Tier II report is the foundation of completing a CAMEO file for a facility. Ensuring this information is accurate, while scheduling the site assessment, ensures there are two opportunities to verify the information for the CAMEO file and the information in the Tier II report.

See Appendix 1 for Scheduling Assessment Checklist

Site Assessment

While conducting the site assessment, the assessor will need to identify a few specific items to ensure they can complete their CAMEO file. It is recommended the assessor conducts a pre- and post-assessment meeting with the facility representative.

Pre-Assessment Meeting

The pre-assessment meeting should be used to verify the information reported on the Tier II report Identify the facility's maximum number of occupants, an overview of the Hazard Analysis site assessment and verification the facility has submitted their Tier 2 report to their local fire department.

Hazard Analysis Assessment

While conducting the analysis of each Section 302 EHS chemical onsite at the facility, the accessor should identify the following:

- Location of the chemical and surrounding objects, i.e., collocated chemicals.
- Verify the maximum quantity of the chemicals (and ensure the amount matches the data reported in the Tier II Report).
- Annotate the type of container/storage tank the EHS chemical is stored in and container's holding capacity (size).

Items to discuss/look for during the Site Visit include:

- Is the SDS for each EHS chemical posted nearby or visible in relation to that chemical's storage location?
- Does the facility have fire extinguishers and where are they located? Can fire extinguishers safely be used around this EHS?
- Does the facility have Shelter-In-Place locations within the facility?
- Does the facility have a site plan/map? Have they uploaded it into E-Plan? Does the facility representative need assistance to create one?
- Have all new and current employees received training on the proper way to handle the EHS?
- Does the facility work with their local fire department to schedule 'practice' fire drills/exercises? Would they like to, if not (encourage them)?

- After filing the facility's annual Tier II Report does the representative email a copy to their local fire department(s)? If not, encourage them to do so.
- Make note of all "findings" and items the facility must correct, change, and update and include this information as 'Additional Notes' in the CAMEO Data Manager file.

The information gathered during the site visit will be used to complete the CAMEO Data Manager file.

Post-Assessment Meeting

During the Post-Assessment Meeting discussion with the facility representative, the assessor will review any "findings" and address items that need to be corrected, changed, or updated. Answer any questions or concerns they may have and complete the Hazards Analysis Site Visit Certification Form (Attachment K found in Appendix 3). Ensure Attachment K is signed by the assessor (you) and the facility representative.

If a new Extremely Hazardous Substance (chemical) is being stored, used for manufacturing purposes, etc., and not listed in the Tier II Report, advise the facility representative to complete and submit a one-time Section 302 Notification for that chemical online in E-Plan. In addition, the facility does not have to wait until the next Tier II filing season to update its current year's Tier II Report. They can log into E-Plan any time during the year to update the facility's Tier II Report with new information, as the system updates all new information in real-time.

For an EHS listed on a facility's Tier II Report but has been removed or is no longer above the TPQ for that chemical, advise the facility to complete a Statement of Determination (HA Attachment L) to provide the date for which the EHS was no longer onsite/above TPQ. Submit Attachment L to FDEM as part of the Hazards Analysis Agreement Deliverable (see HA Agreement Attachment A Budget and Scope of Work for more information).

A facility no longer in operation or sold to a different company must complete a State of Determination (HA Attachment L) to provide the date of closure/sale. Submit Attachment L to FDEM as part of the Hazards Analysis Agreement Deliverable (see HA Agreement Attachment A Budget and Scope of Work for more information).

A facility is required to complete and submit Attachment L SOD should any of the above circumstances apply to them at any time. Facilities can submit SOD forms by emailing them as an attachment to State EPCRA/Tier II Compliance staff.

See Appendix 2 for Facility Assessment Checklist

CAMEO Software

CAMEO is a system of software applications used to plan for and respond to chemical emergencies. Developed by EPA and the National Oceanic and Atmospheric Administration to assist front-line chemical emergency planners and responders, CAMEO can access, store, and evaluate information critical for developing emergency plans. The software and their descriptions are below. (https://www.epa.gov/cameo)

- **CAMEO Data Manager**: CAMEO Data Manager (DM) - Database and Information Management Tool is a database application that includes seven modules (such as Facilities and Contacts) to assist with data management requirements under the Emergency Planning and Community Right-to-Know Act (EPCRA). A facility's Tier II Report contains basic facility identification information, Tier II contact information, and information such as storage amounts, storage conditions, and locations for chemicals stored or used at the facility. Using CAMEO DM, you can import Tier II data files and review the information that facilities have submitted in their annual Tier II Reports.

- **MARPLOT** - Mapping Application for Response, Planning, and Local Operational Tasks is the mapping program for the CAMEO Software Suite, which is used widely to plan for and respond to chemical emergencies. Map objects can be linked to records in CAMEO Data Manager, to store additional information about these locations (such as emergency contact information or site plans). Additionally, the areas contaminated by potential or actual chemical release scenarios can be displayed on the maps to determine potential impacts and help users make decisions about the degree of hazard posed by the releases.

- **CAMEO Chemicals - Chemical Response Datasheets and Reactivity Prediction Tool** is the hazardous chemical database for CAMEO Software Suite. CAMEO Chemicals has an extensive chemical database with critical response information for thousands of chemicals. There are two primary types of datasheets in the database: chemical datasheets and UN/NA datasheets. Chemical datasheets provide physical properties, health hazards, information about air and water hazards, and recommendations for firefighting, first aid, and spill response. UN/NA datasheets provide response information from the Emergency Response Guidebook and shipping information from the Hazardous Materials Table (49 CFR 172.101), which is used widely to plan for and respond to chemical emergencies. CAMEO Chemicals also has a tool to predict possible hazards if chemicals are mixed.

- **ALOHA** - Areal Locations of Hazardous Atmospheres is the hazard modeling program for the **CAMEO Software Suite**. **ALOHA** is an atmospheric dispersion model used for evaluating releases of hazardous chemical vapors. ALOHA allows the user to estimate the downwind dispersion of a chemical cloud based on the toxicological/physical characteristics of the released chemical, atmospheric conditions, and specific circumstances of the release. ALOHA can estimate threat zones associated with several types of hazardous chemical releases, including toxic gas clouds, fires, and explosions. Threat zones can be displayed on MARPLOT maps to help users assess geospatial information, such as whether vulnerable locations (such as hospitals and schools) might be impacted by the release or whether other nearby factors (such as construction zones) might complicate the response.

***CAMEO Data Manager (DM), CAMEO Chemicals, & MARPLOT are required to complete the Hazards Analysis Agreement. ***

CAMEO Data Manager

The CAMEO Data Manager will be the software used to complete the 'Draft Hazard Analysis Report' for submission to FDEM for review and approval. The CAMEO Data Manager should be viewed as a separate system, the information saved in the data manager is only saved inside the software. Individual files will need to be imported and exported to be edited or saved as a file. ***Maintain a county specific file. You will need to submit your CAMEO data by county.***

When completing a Hazard Analysis report, all items from the 'Hazard Analysis Contract Checklist and CAMEO Guide" (Appendix 6) need to be completed for each facility.

Import:

If CAMEO files have been completed for facilities in the past, they can be imported into the Data Manager. From here, the specific facility's information can be edited from a previous year.

Click the "Import" button in the upper right-hand corner and follow the onscreen instructions to upload your previous year CAMEO file.

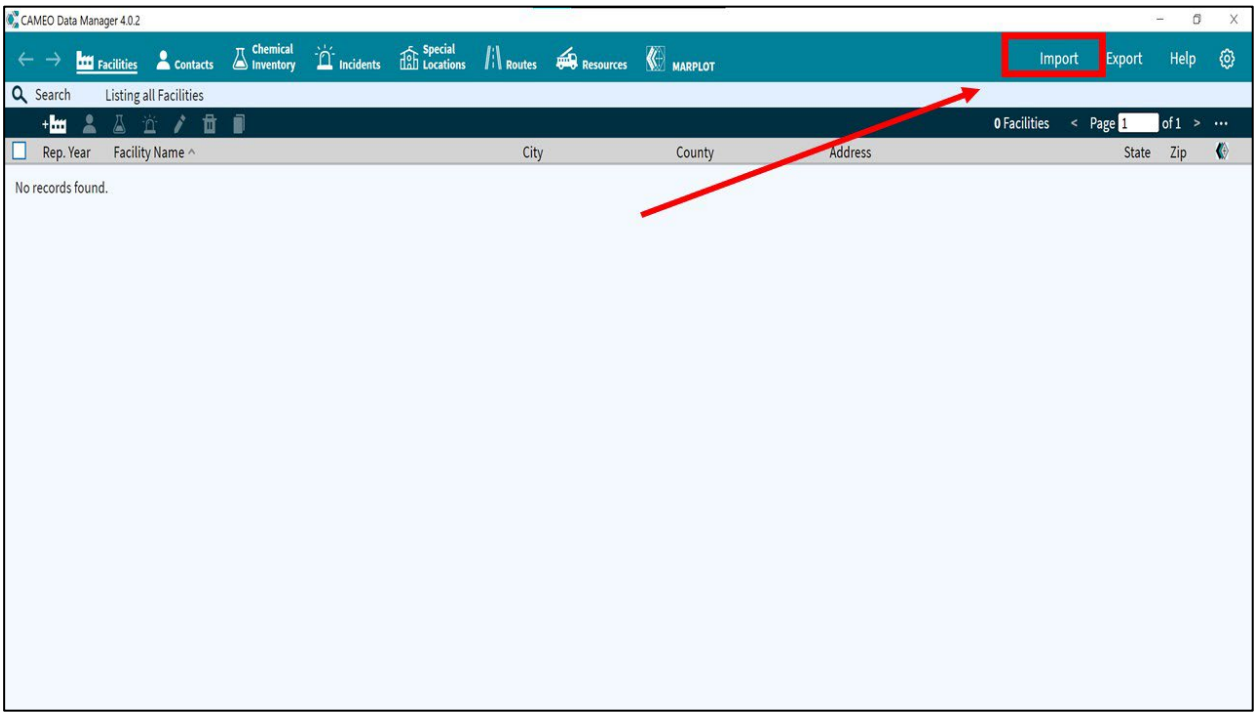


Figure 4: Import CAMEO File

Facility Information

In the green header at the top of the screen insert the “Report Year” and “Facility Name” in the provided text boxes.

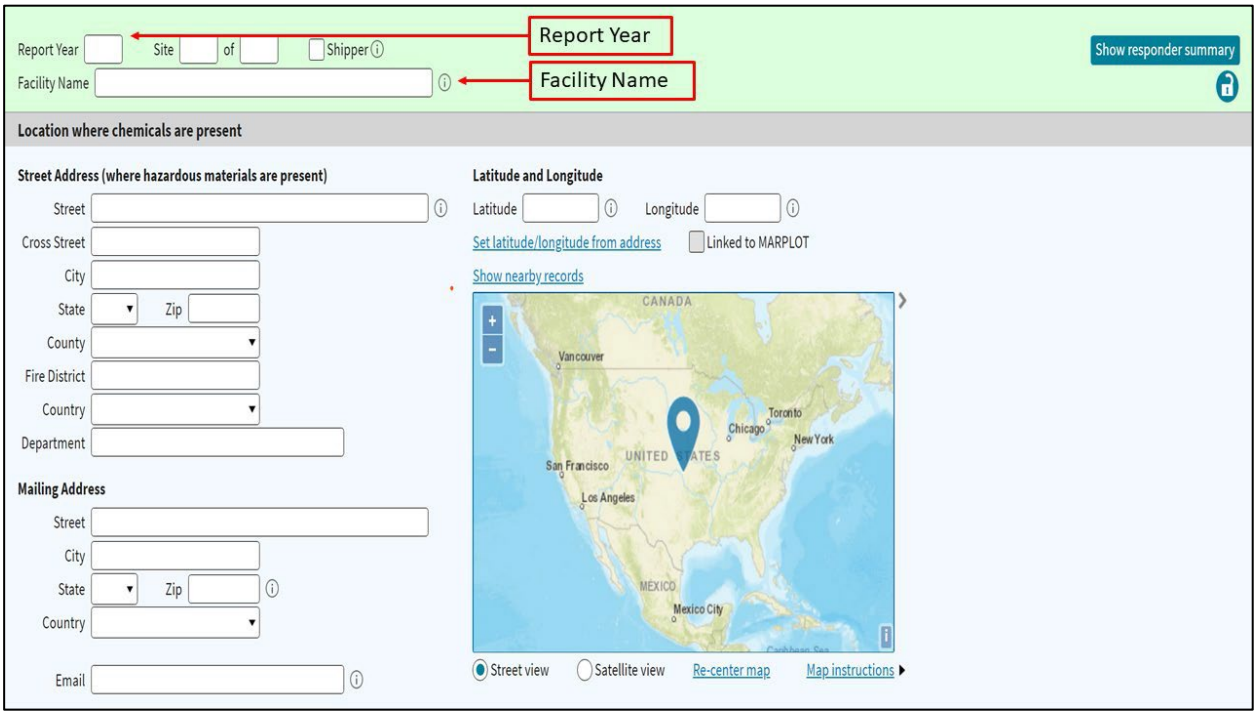


Figure 5: Report Year and Facility Name

Enter the “Street Address”, “Lat & Long” & “Mailing Address” information into the appropriate boxes. ***Enter the facility SERC ID number in the Department text area****

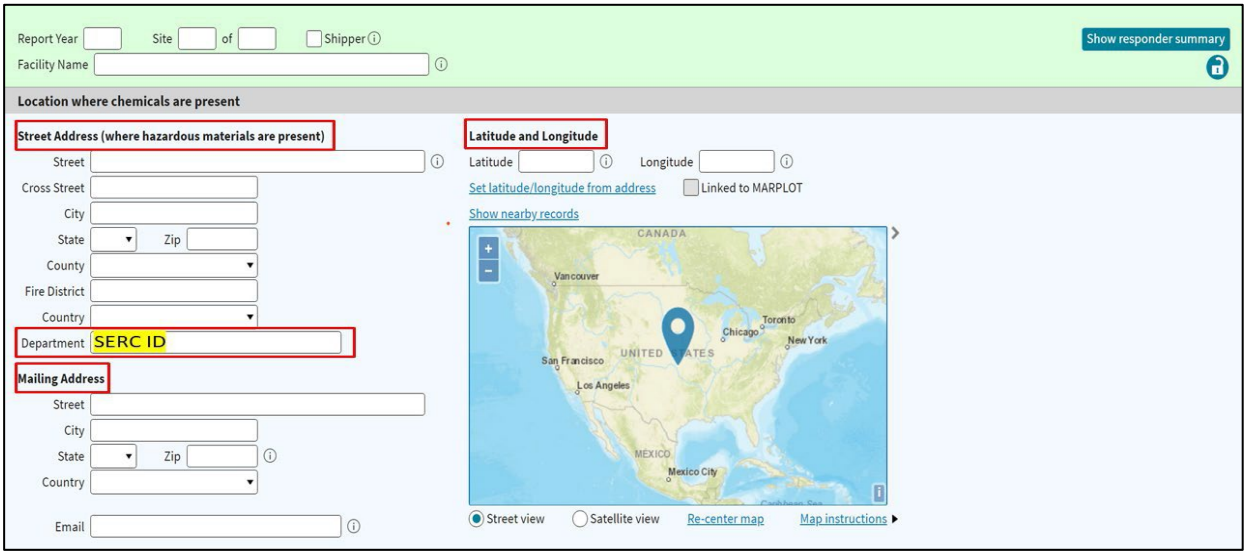


Figure 6: Street & Mailing Address, Lat. & Long, SERC ID & Mailing Address

Facility Phone Numbers

Click “Add phone” to add a contact number. There must be two numbers at a minimum.
<u>One regular contact number & and one 24-hour emergency contact number******</u>

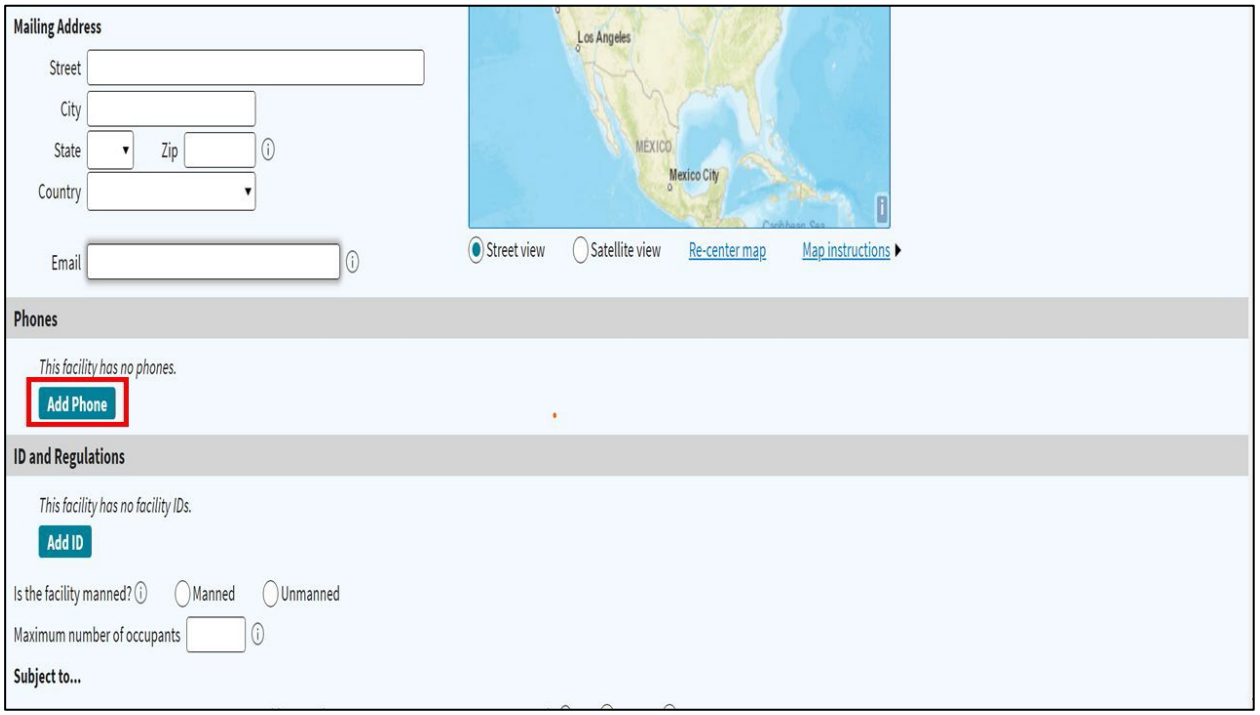


Figure 7: Adding Phone Numbers

ID and Regulations

Click "Add ID" to add specific IDs; this information can be found on the Tier II Report under "Data Management." Identify if the facility is manned or unmanned and the maximum number of occupants that could be onsite. ***If the facility is unmanned the maximum occupancy is 1****

Additionally, signify whether the facility is subject to the RMP program and if the chemicals onsite are Section 302 EHS chemicals. This information is located on the Tier II report under "Type of Facility."

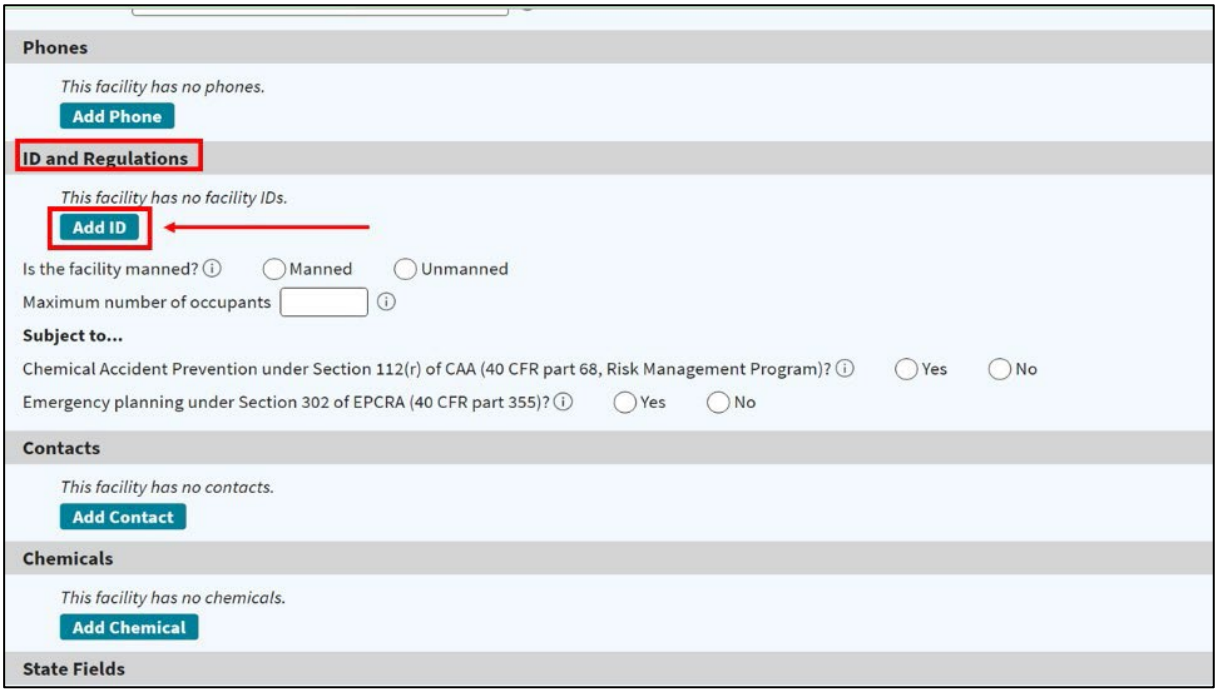


Figure 8: ID and Regulations

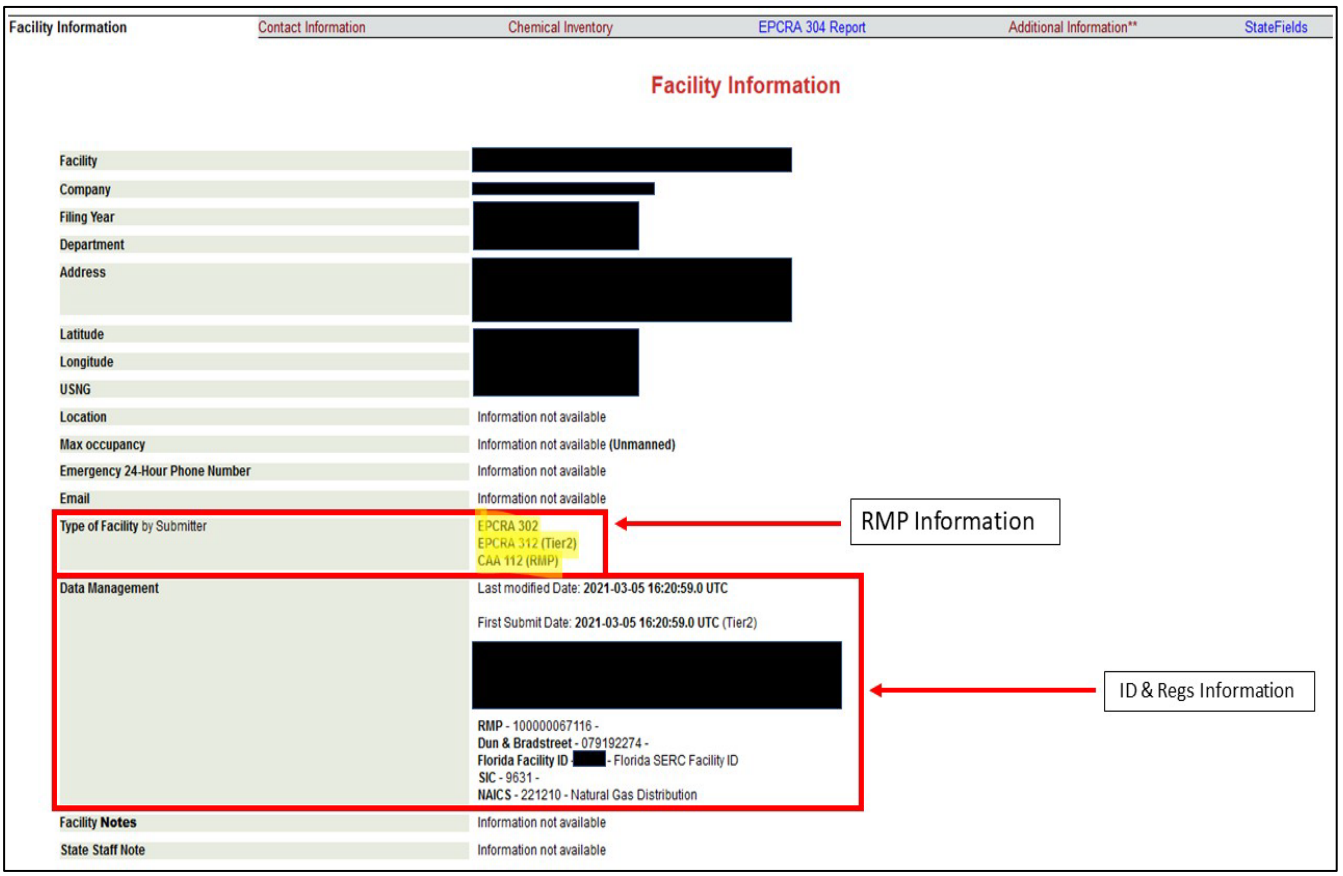


Figure 9: E-Plan ID & Regs

Adding a Contact

Click the "Add Contact" to add a contact for the facility and input their information and contact numbers. ***There should be a primary and secondary contact for each facility.***

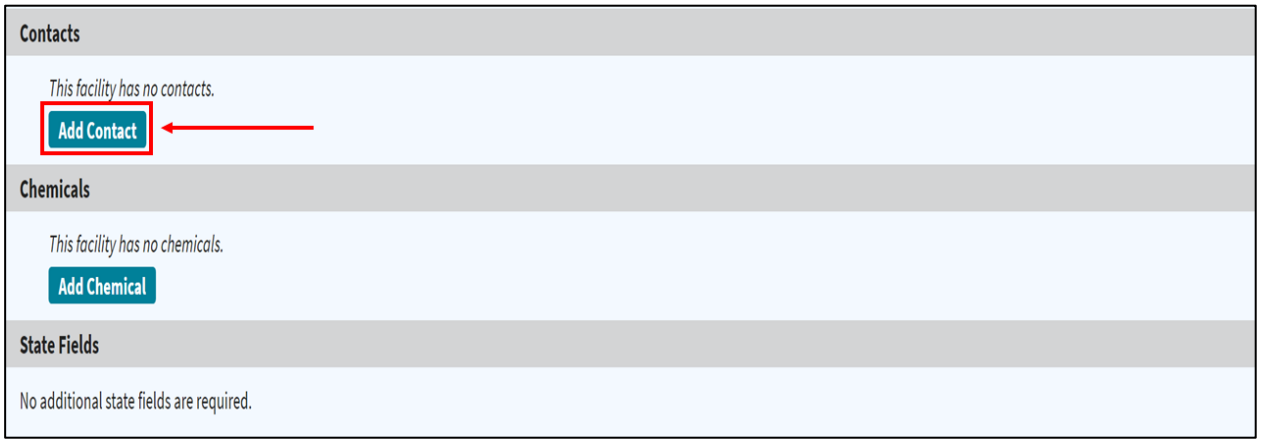


Figure 10: Adding Contacts

Historical Incident Record

CAMEO Data Manager allows an assessor to provide a detailed historical accident record. To link a location to MARPLOT, check the "linked to MARPLOT" box. **A historical accident report can be edited should an accident occur.**

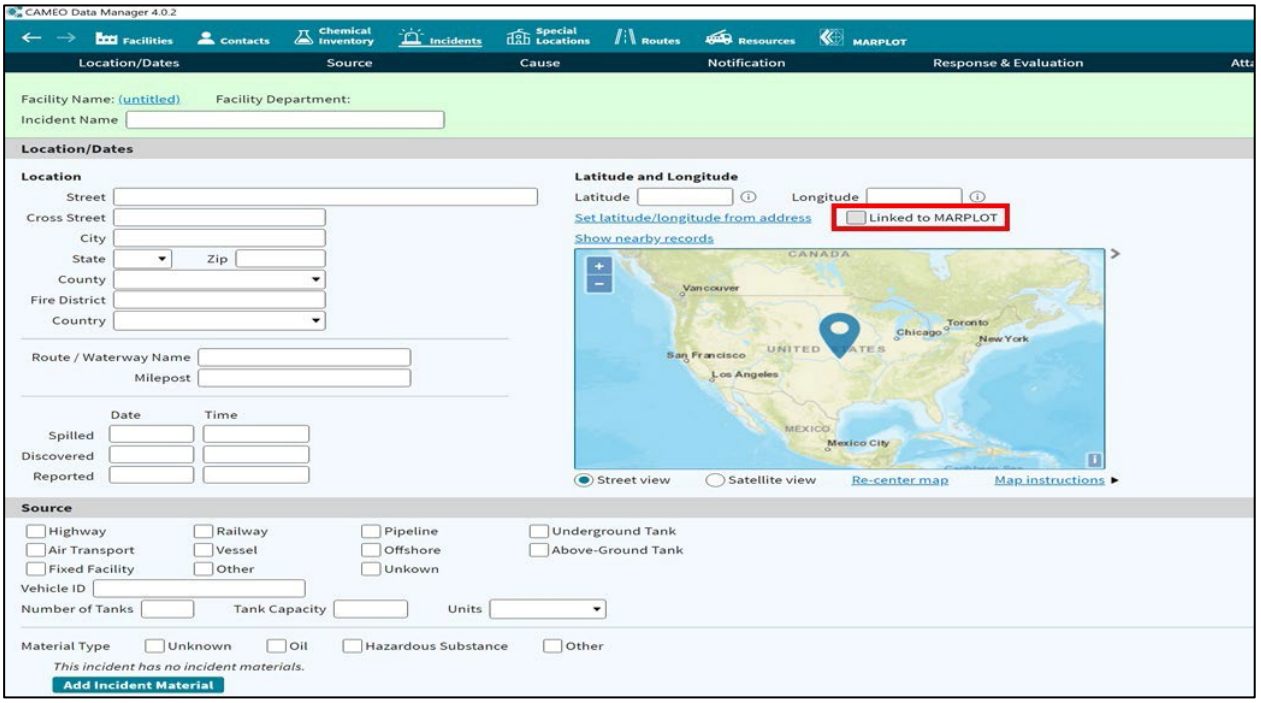


Figure 11: Historical Accident Record

Facility Notes

In the notes section, the assessor should provide general Transportation and Evacuations routes, and the last site visit date. If the hazard analysis report was conducted over the phone it needs to be identified.

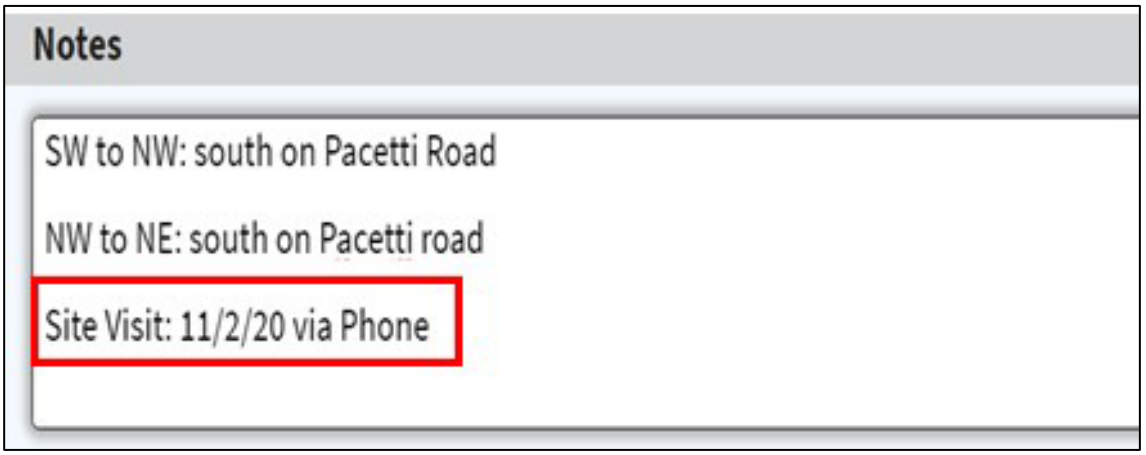


Figure 12: Notes

Adding Chemicals:

To add a chemical click “Add Chemical”, to complete this section it is recommended the assessor pull the *CAMEO Chemicals* information, the chemical’s safety data sheet (SDS) and the facilities Tier 2 report (E-Plan).

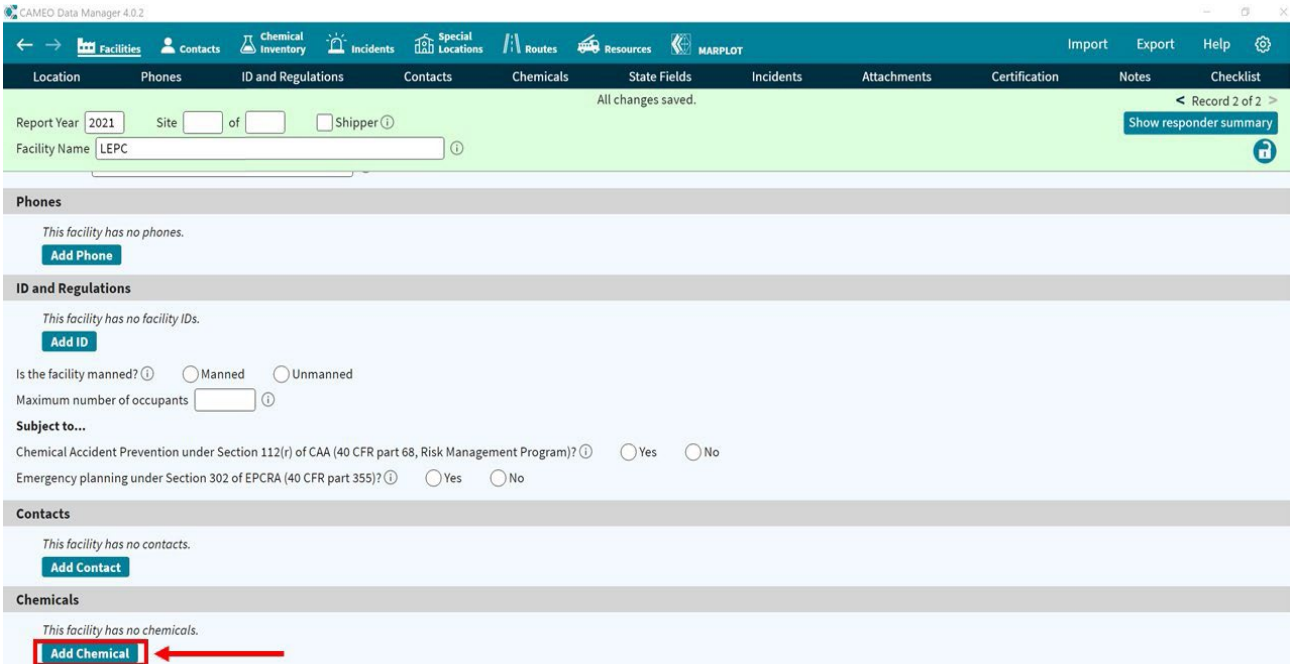


Figure 13: Adding a Chemical

CAMEO Chemicals

Before adding a new chemical to a facility's report, the chemical should be opened in *CAMEO Chemicals,* this software system will assist in completing the Chemical report in the *CAMEO Data Manager.*

To search for a chemical in *CAMEO Chemicals* insert the Name, CAS Number or UN/NA Number. In the "New Search" page.

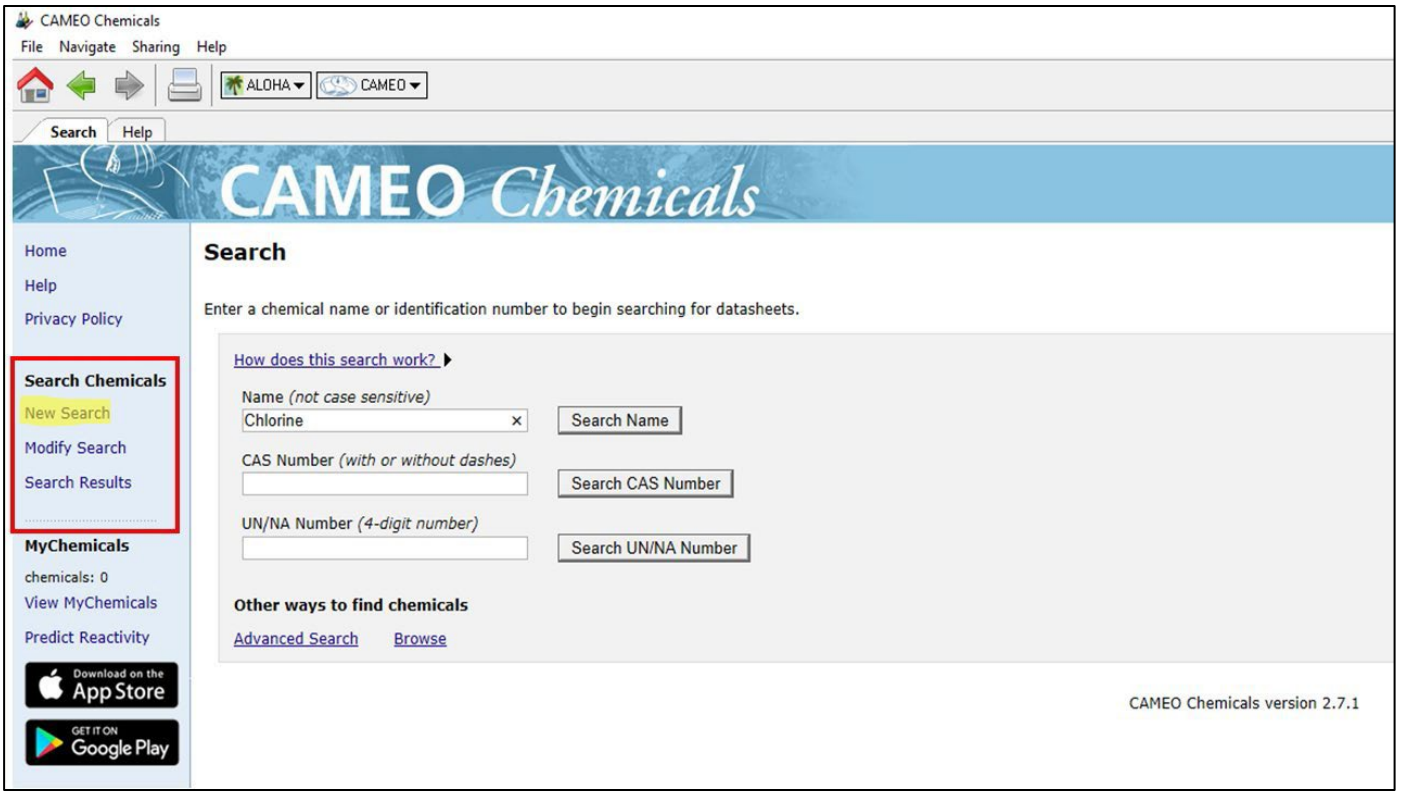


Figure 14: CAMEO Chemicals

Chemical Search

When searched, all chemicals containing that information will be identified. Select the chemical located at the facility.

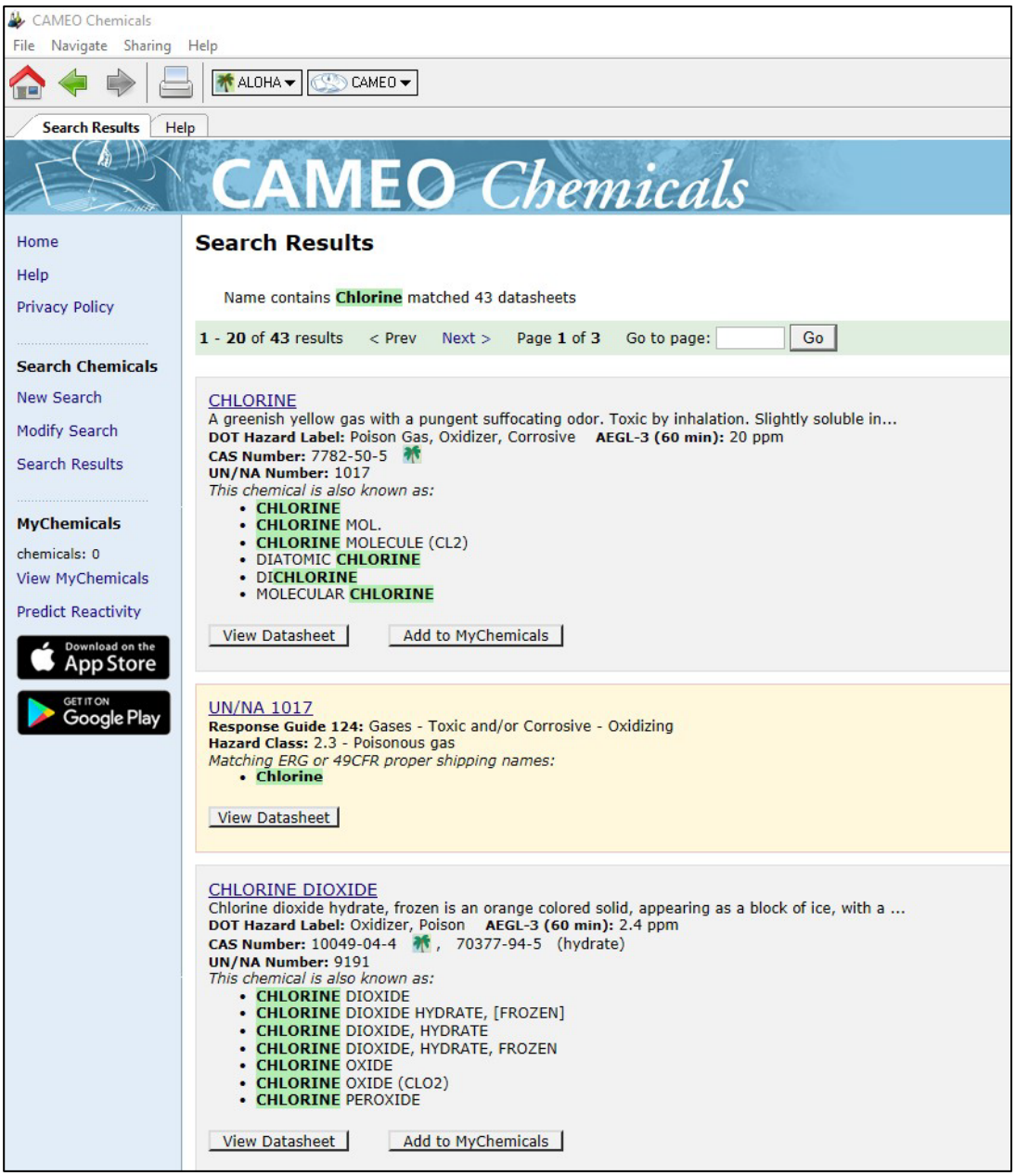


Figure 15: CAMEO Chemical Search

Chemical Information

Using *CAMEO Chemicals,* the chemical's Safety Data Sheet (SDS) and information from the facility's Tier 2 report (E-plan) complete the Chemical information page. ***One chemical report is required for each Section 302 EHS located at the facility over the TPQ.***

Correlating information has been identified in Figures 15, 16 & 17. Safety Data Sheets can be obtained online. For the CAMEO Data Manager chemical information page, the assessor must complete the highlighted green title information (Figure 18), physical state and amounts, hazards, & storage location(s).

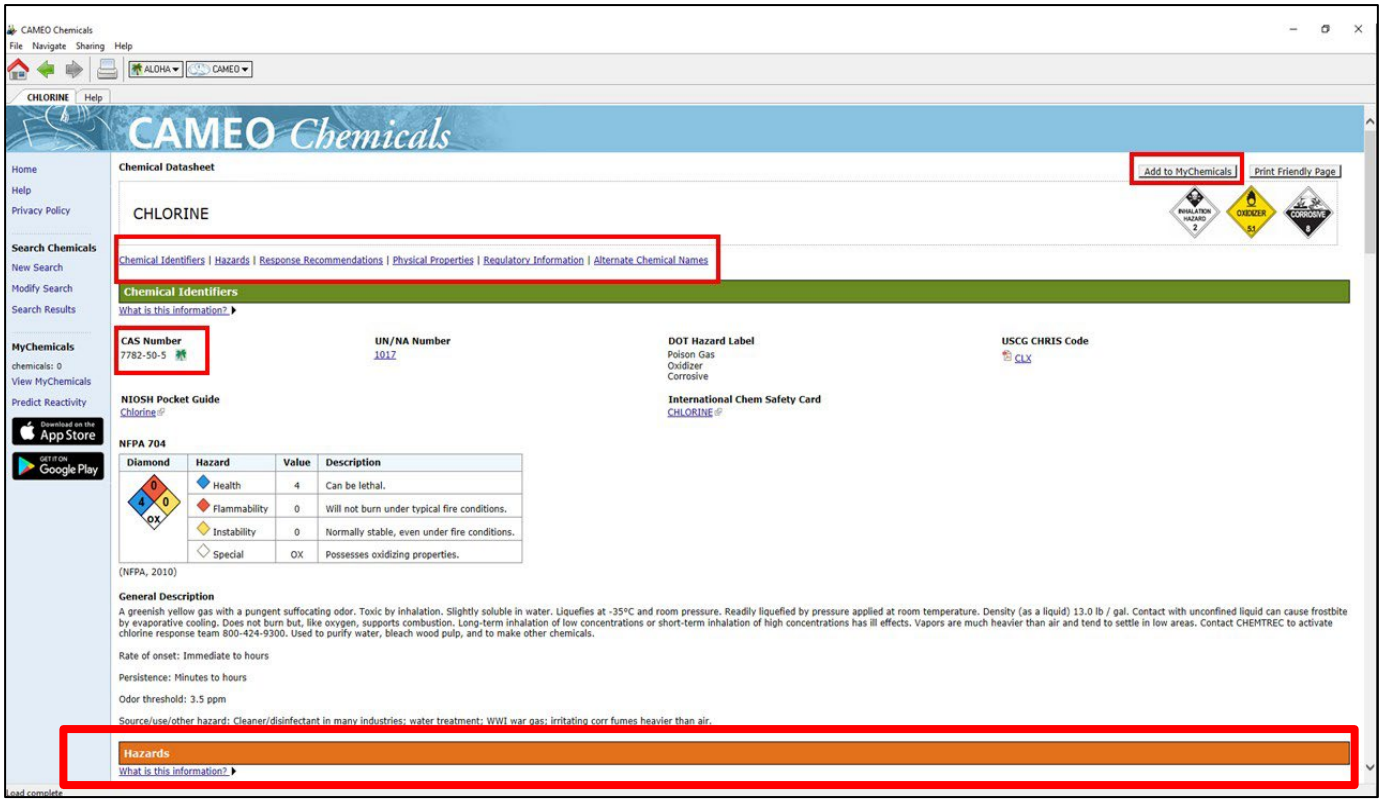
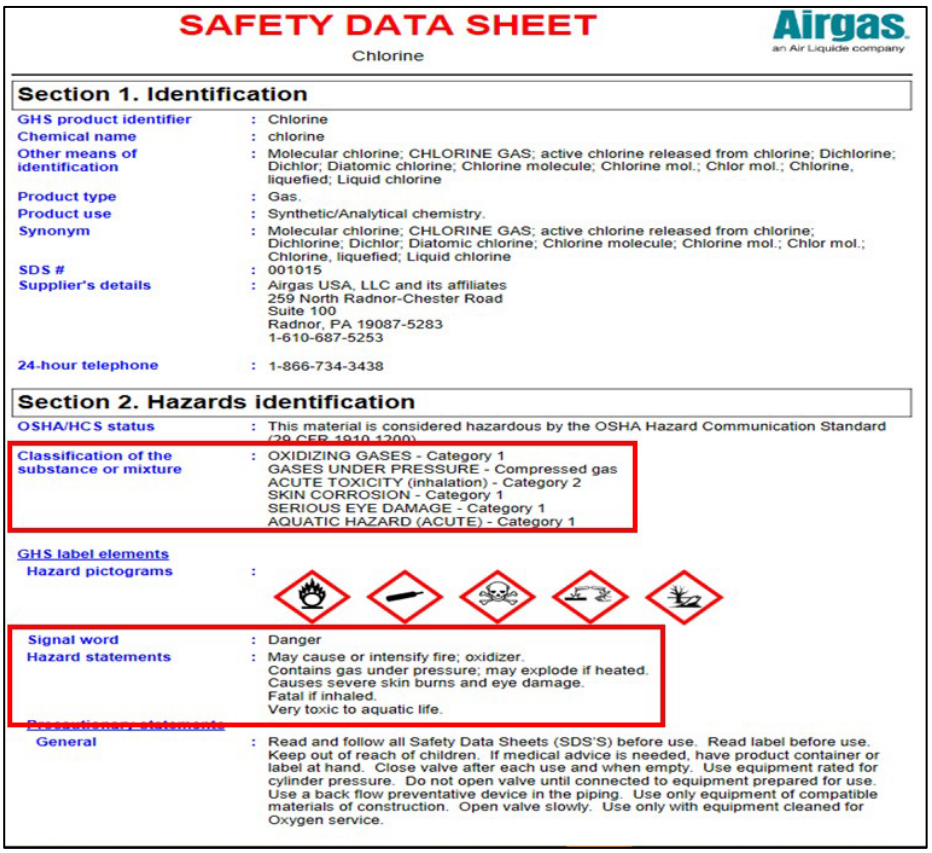


Figure 16: CAMEO Chemical information



SAFETY DATA SHEET

Chlorine

Airgas
an Air Liquide company

Section 1. Identification

GHS product identifier	:	Chlorine
Chemical name	:	chlorine
Other means of identification	:	Molecular chlorine; CHLORINE GAS; active chlorine released from chlorine; Dichlorine; Dichlor; Diatomic chlorine; Chlorine molecule; Chlorine mol.; Chlor mol.; Chlorine, liquefied; Liquid chlorine
Product type	:	Gas.
Product use	:	Synthetic/Analytical chemistry.
Synonym	:	Molecular chlorine; CHLORINE GAS; active chlorine released from chlorine; Dichlorine; Dichlor; Diatomic chlorine; Chlorine molecule; Chlorine mol.; Chlor mol.; Chlorine, liquefied; Liquid chlorine
SDS #	:	001015
Supplier's details	:	Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253
24-hour telephone	:	1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	OXIDIZING GASES - Category 1 GASES UNDER PRESSURE - Compressed gas ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 AQUATIC HAZARD (ACUTE) - Category 1
GHS label elements		
Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	May cause or intensify fire; oxidizer. Contains gas under pressure; may explode if heated. Causes severe skin burns and eye damage. Fatal if inhaled. Very toxic to aquatic life.
Precautionary statements		
General	:	Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Open valve slowly. Use only with equipment cleaned for Oxygen service.

Figure 17: Safety Data Sheet

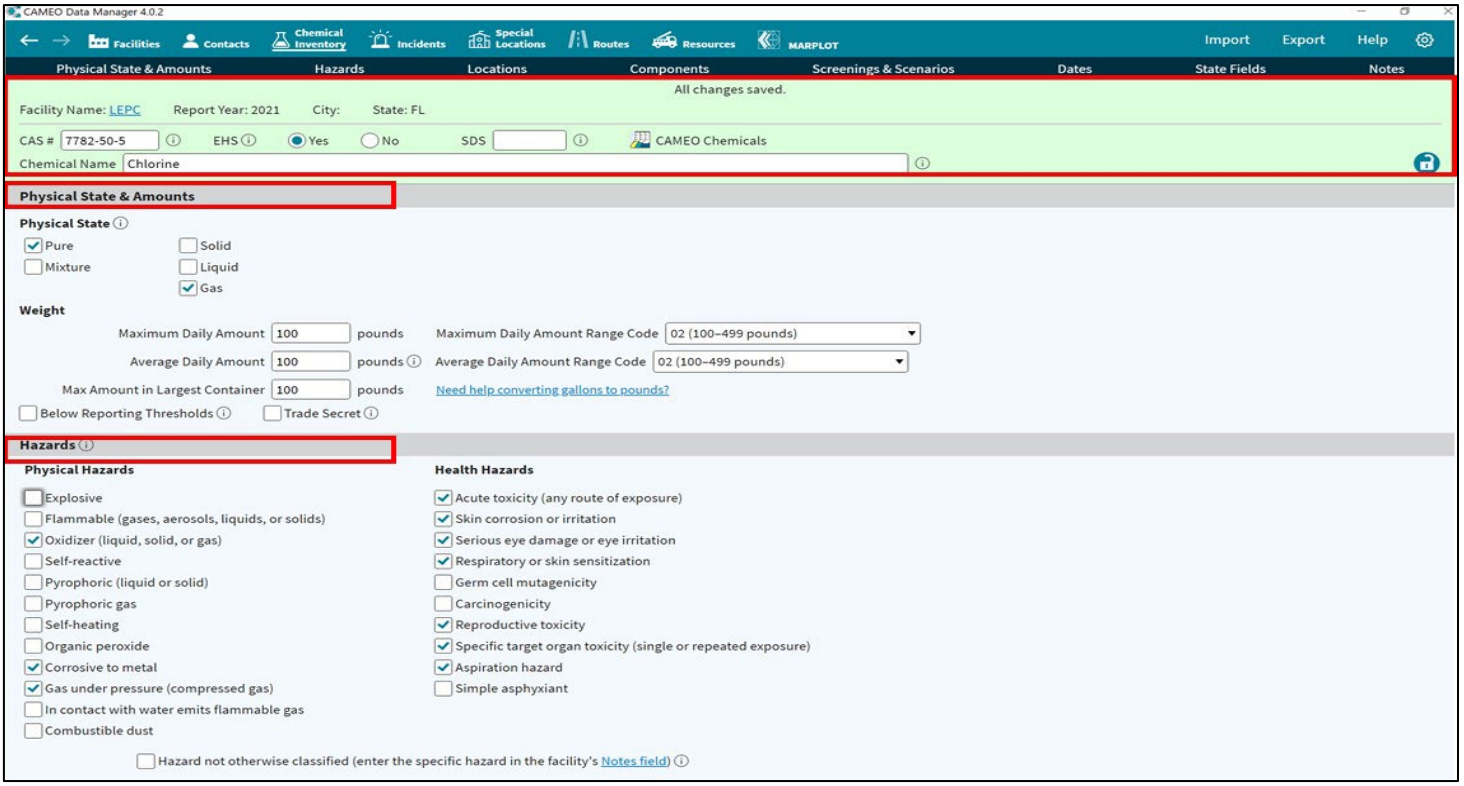


Figure 18: Required Chemical Information

Scenarios, Vulnerability Zone & MARPLOT

Adding a Scenario

A scenario report is required for all Section 302 chemicals over TPQ. This report will generate a Vulnerability Zone (VZ) for the specific chemical and area surrounding the chemical. This vulnerability zone will then need to be inserted into *MARPLOT* to show the VZ on a map. ***All required maps can be made using PowerPoint; however, the assessor can use any preferred system.***

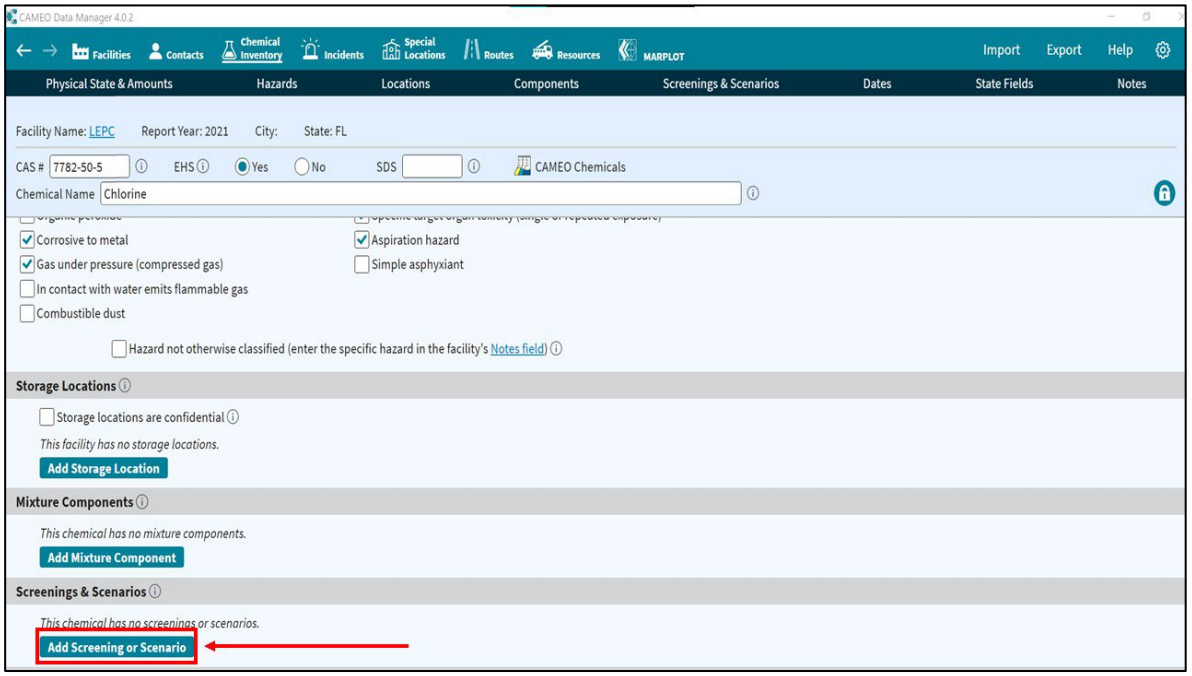


Figure 19: Screening & Scenario

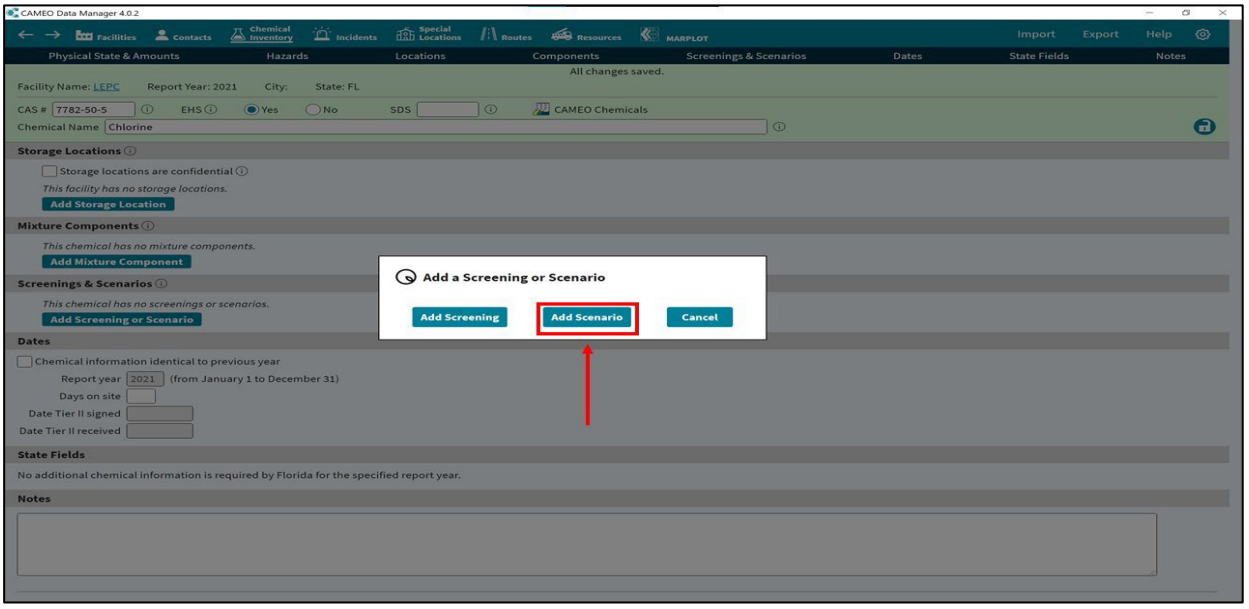


Figure 20: Add Scenario

When inputting information into your scenario report there are a few items to consider, these items are below. This report should be run as the *worst-case scenario*. Once all the information has been entered click "Estimate Threat Zone Radius" and CAMEO will calculate a VZ. For concentration amount, if the chemical is pure the concentration is 100% if it is mixed identify the amount by percentage that is made up of the Section 302 EHS.

- Scenario Name = Chemical Name-Facility Name
- Amount Released = Facilities largest container or interconnect container (in pounds)
- Release Duration = 10 minutes for gases, solids in solution or powders. No entry for liquids is required
- Wind Speed = Average wind speed of the area (typically 3-6mph)
- Ground Roughness = Urban or Forest is recommended
- Risk Assessment = Information obtained from facility assessment

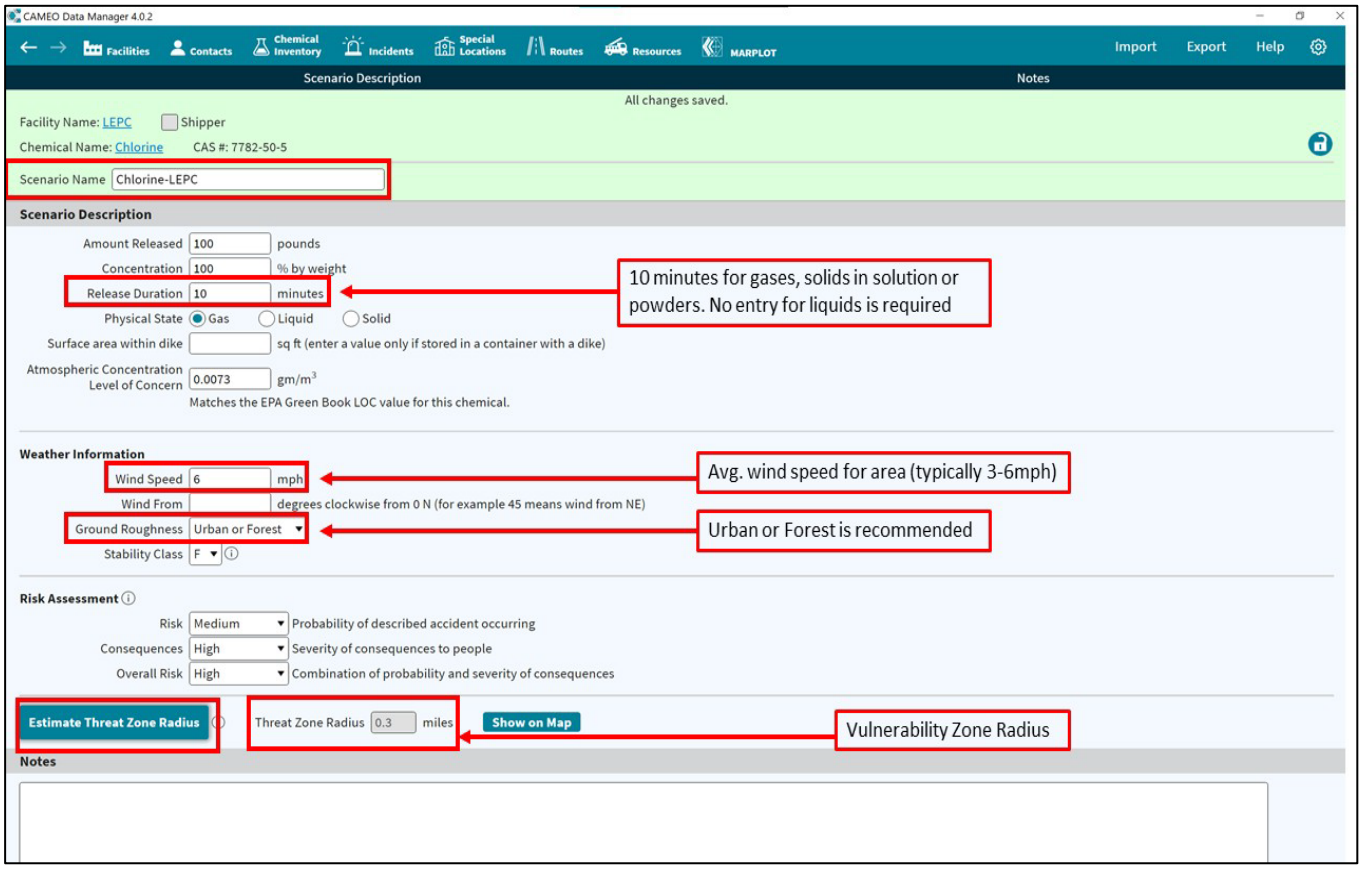


Figure 21: Calculating a VZ

Required Vulnerability Zone Map

Once the correct facility information and chemical scenario data has been entered into the *CAMEO Data Manager*, it is possible to automatically link everything to *MARPLOT* by clicking the *MARPLOT* header at the top of the *CAMEO Data Manager* page and following the on-screen prompts.

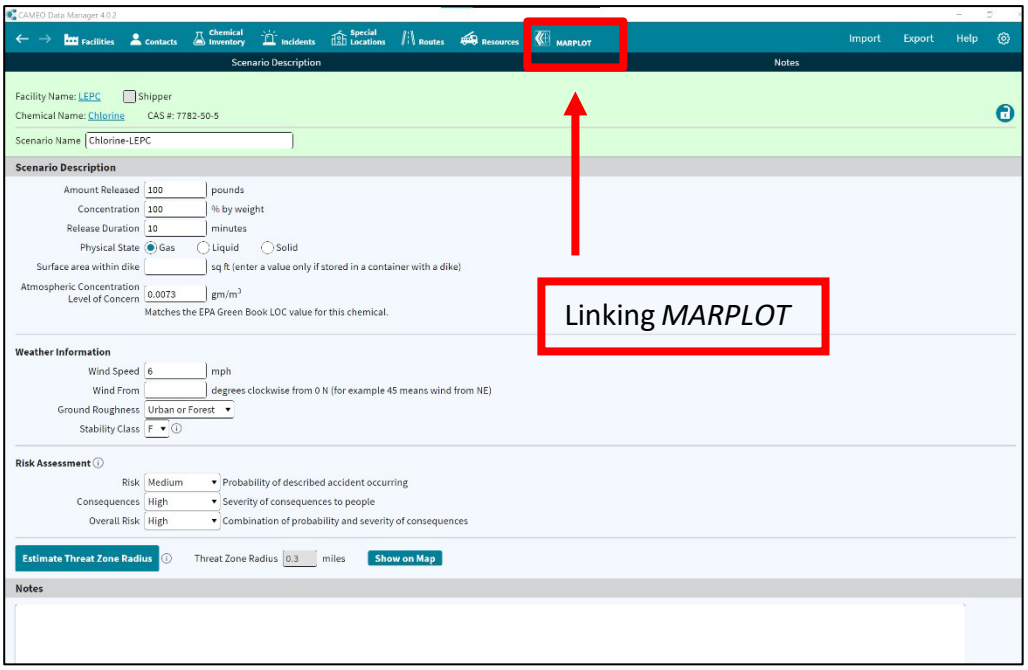


Figure 22: Linking MARPLOT

Adding Population and Critical Facility Information

After completing a VZ map, in the chemical scenario notes section the assessor will need to enter population data. This needs to include the total population and number of households (Figures 31 & 32). In addition to this census data, the population of any critical facilities located within the vulnerability zone need to be identified i.e., schools, hospitals, government offices etc. This information is retrieved by calling the facility and requesting this information.

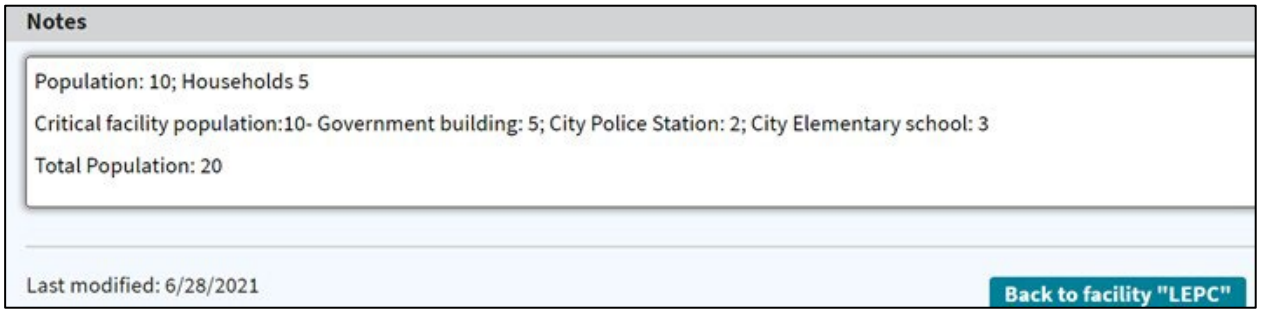


Figure 23: Population Data

MARPLOT

Locating Facility

For this guide, the following section will be a step-by-step process of creating the required map using *MARPLOT* manually.

When opening MARPLOT, the first thing that needs to be done is finding the facility. This is done by clicking the binocular symbol in the "Search & Get Info" header. Doing this will open a drop-down menu, from here select either address or coordinates and insert that information for the facility.

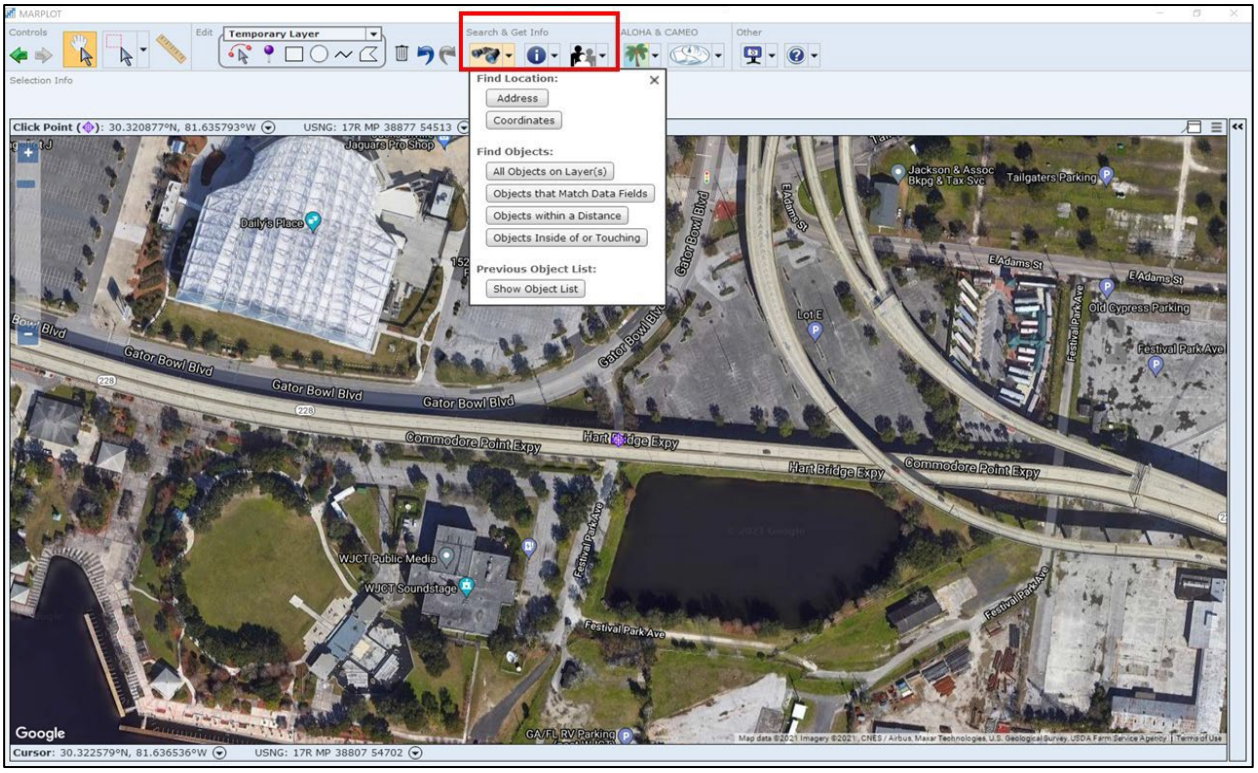


Figure 24: MARPLOT- Locating Facility

Identifying Chemical Location

Once the facility location has been found, place a point (symbol) on the exact location where the chemicals are located at the facility. This is done by clicking the purple pin under the edit information under temporary layer. Click the purple pin, then click the location of the chemical this will open an “Objects Settings (Point) screen.”

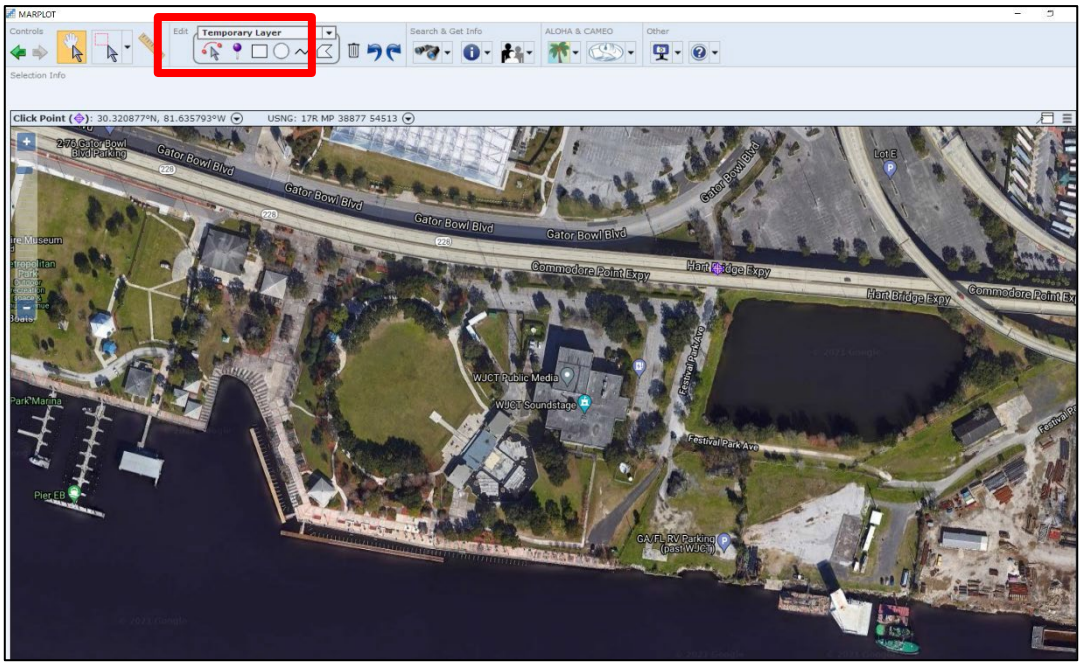


Figure 25: MARPLOT- Adding Chemical Location

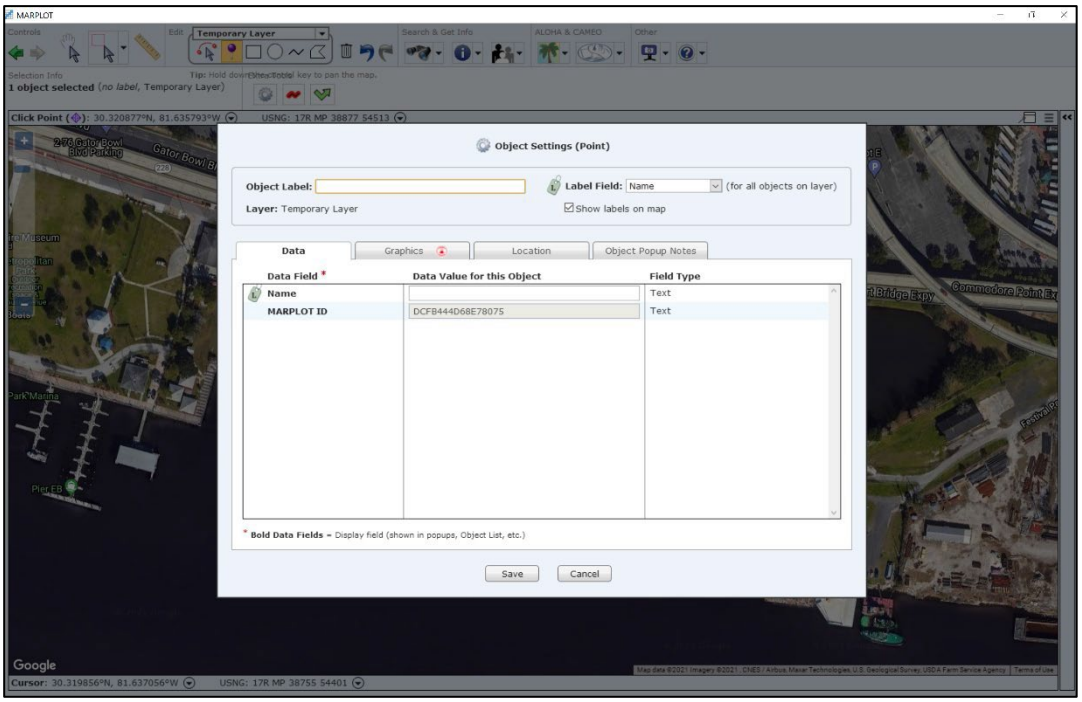


Figure 26: MARPLOT- Chemical Point Information

In the “Object Label” box use the chemical name. It is recommended that the graphic for the point be the “Chemical Interest (66)” symbol. This can be completed by clicking the graphics tab, clicking the current symbol, typing “66” into the symbol name/number search (bottom right corner) and click “OK”.

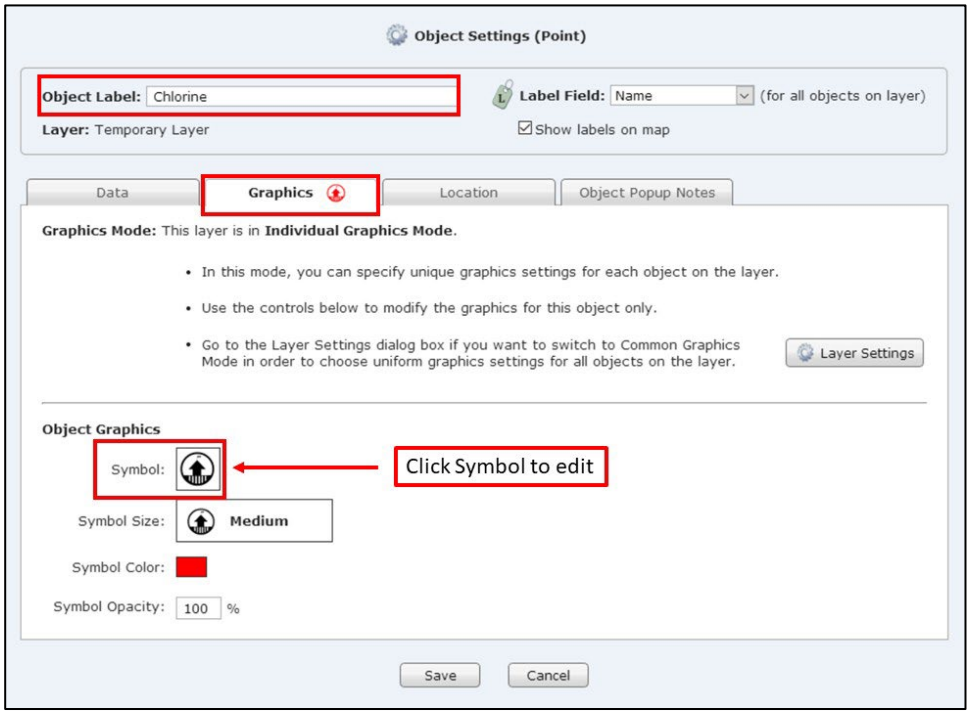


Figure 27: MARPLOT- Edit Chemical Symbol

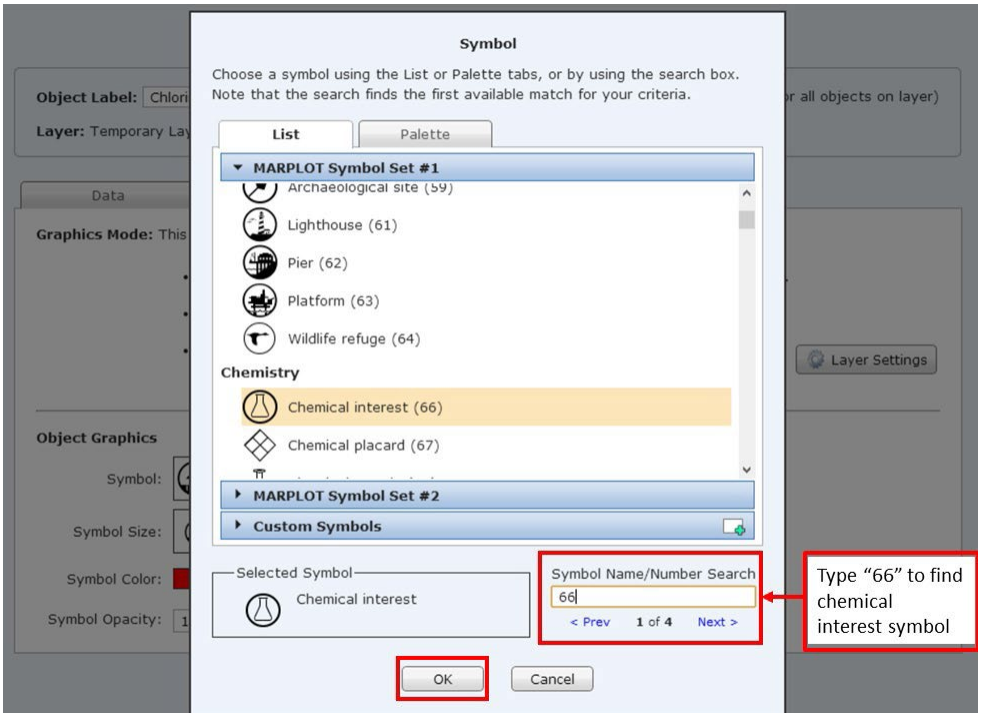


Figure 28: MARPLOT- Select Chemical Interest Symbol

It is recommended for the symbol size be set to medium, and the symbol color be set to red. Click save to add the symbol to the *MARPLOT* map as a temporary layer.

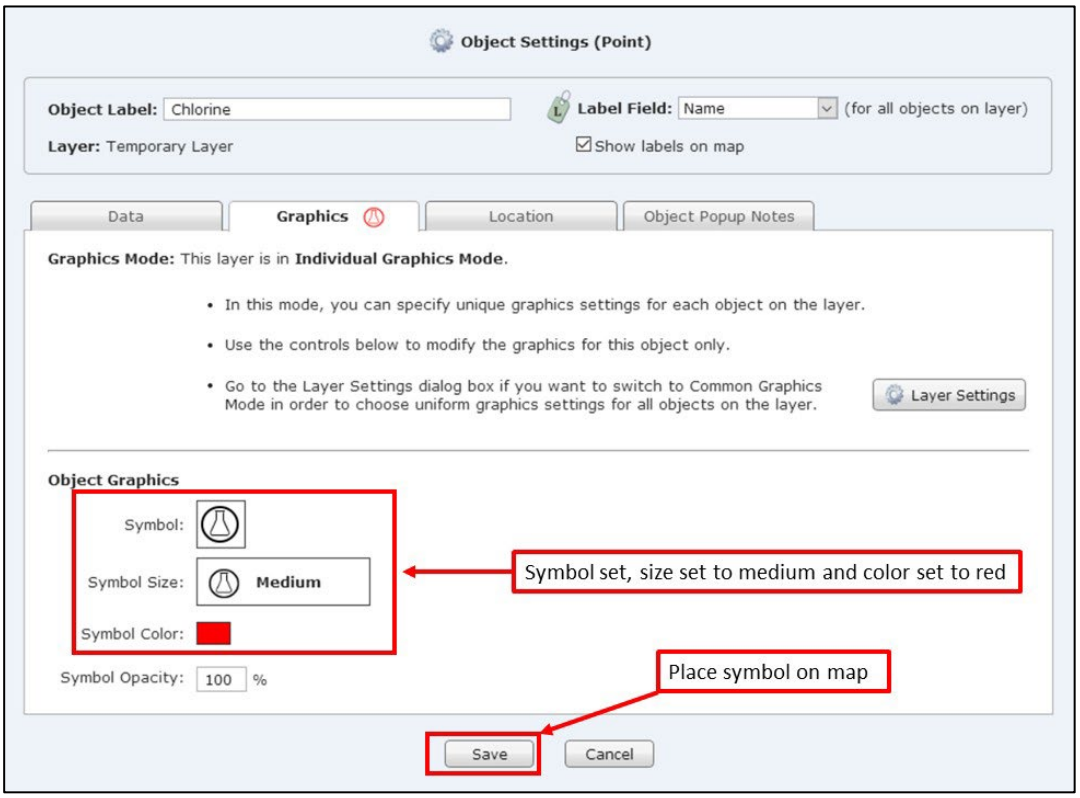


Figure 29: MARPLOT- Symbol Design and Save

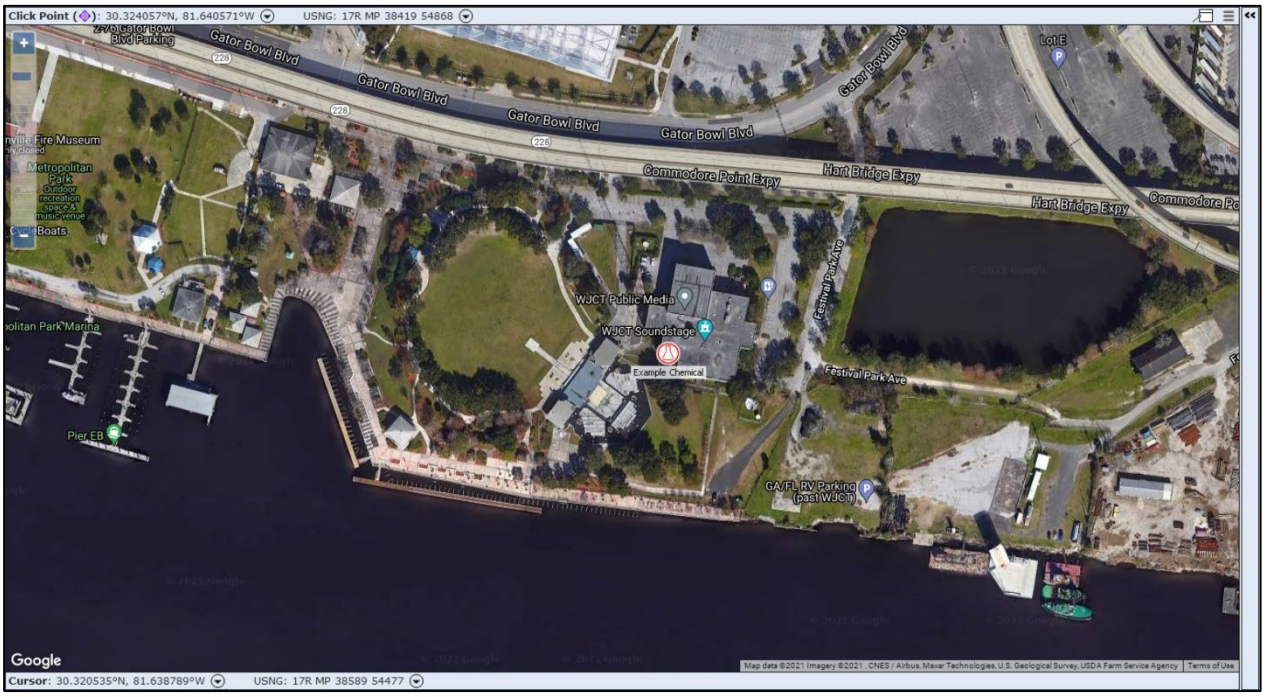


Figure 30: MARPLOT- Added Chemical Layer

Saving Facility Map

Once the chemical location has been identified it needs to be saved because it will need to be uploaded into the *CAMEO Data Manager*. To save the facility map, under the 'Other' section in *MARPLOT* select the 'Take a Screenshot icon' and select 'save map area to image file'; saving the file somewhere it can be retrieved later. When saving the map, the file name needs to be like the example below.

SERC#number-Facility Name-Facility Map

Note: When saving the facility map, the map needs to be zoomed in to only be able to identify the facility.

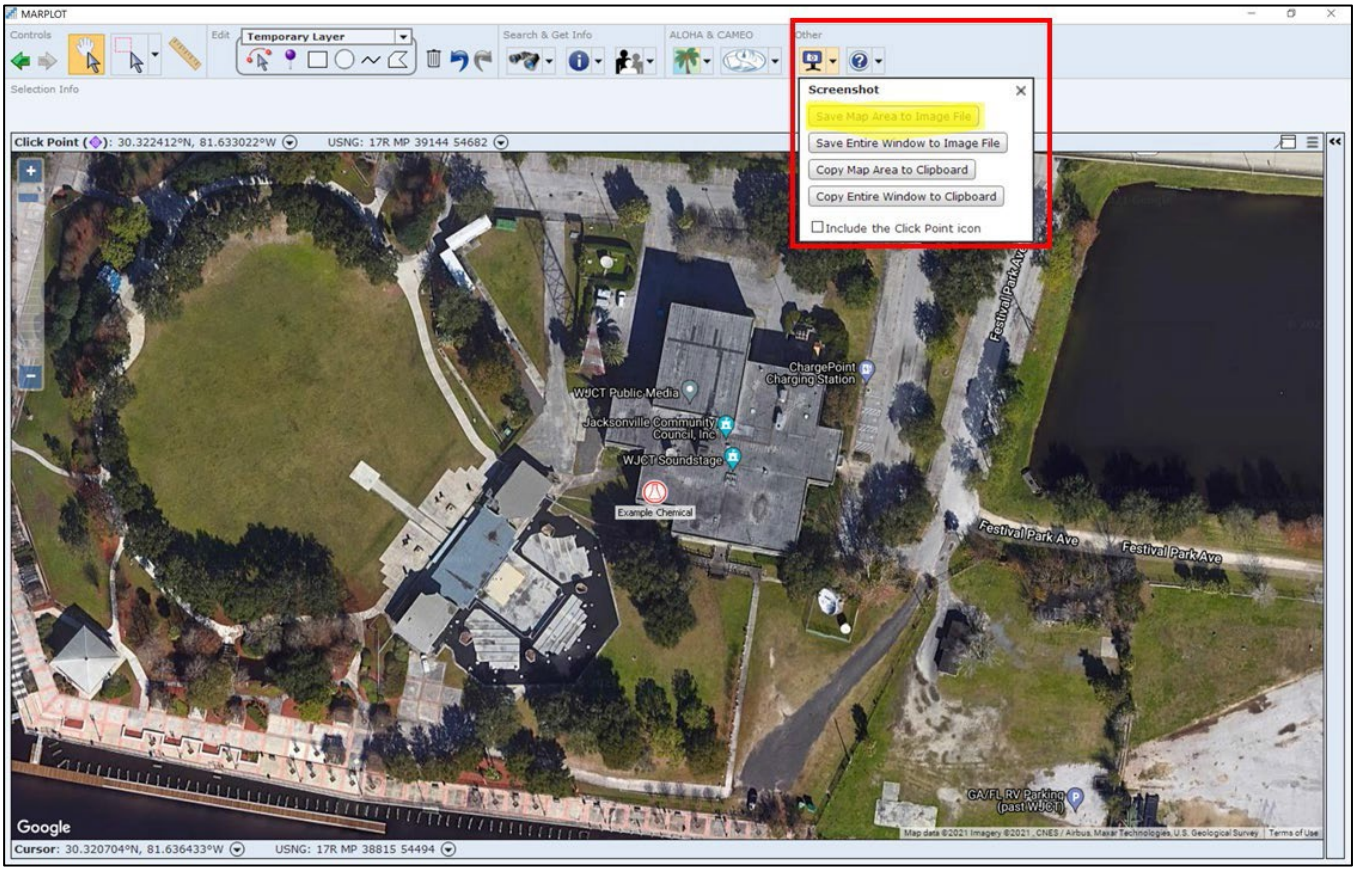


Figure 31: MARPLOT- Save Facility Map

Adding Vulnerability Zone

To add a vulnerability zone to the MARPLOT map, select the "add circle object" in the Edit: Temporary layer section. Then click the exact location of the chemical symbol (Figures 26 & 27) and drag the radius of the circle to match the calculated amount from the *CAMEO Data Manager* threat zone radius (Figure 20). Once completed, an object settings page will open.
Title the circle "Chemical Name: VZ" in the "Object Label" box, and under graphics tab change the line color to red and change the fill pattern to "No Fill".

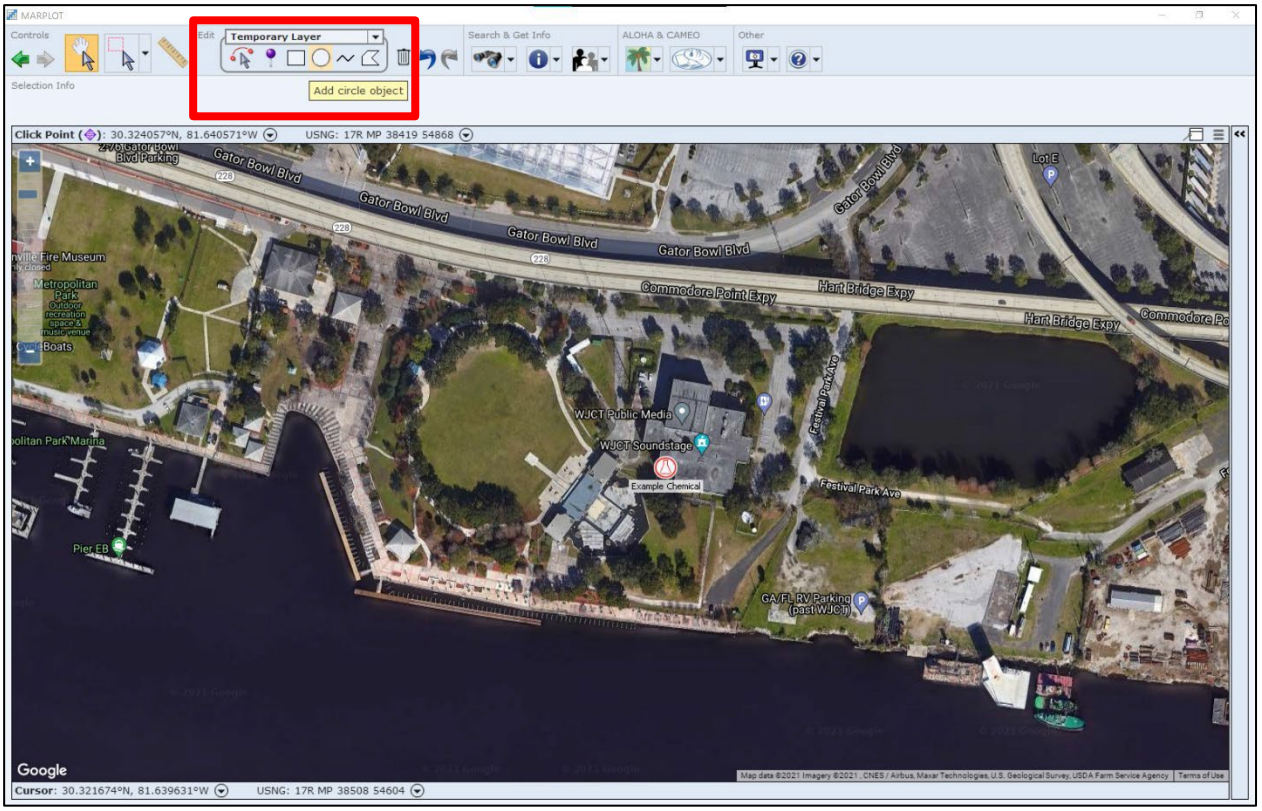


Figure 32: MARPLOT- Select VZ

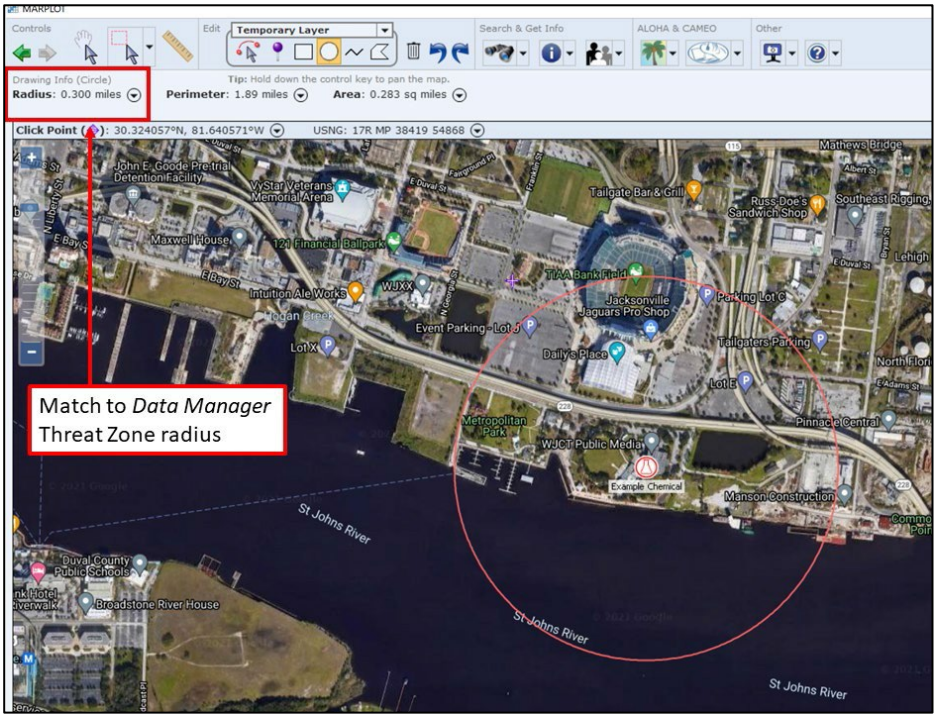


Figure 33: MARPLOT- Create VZ

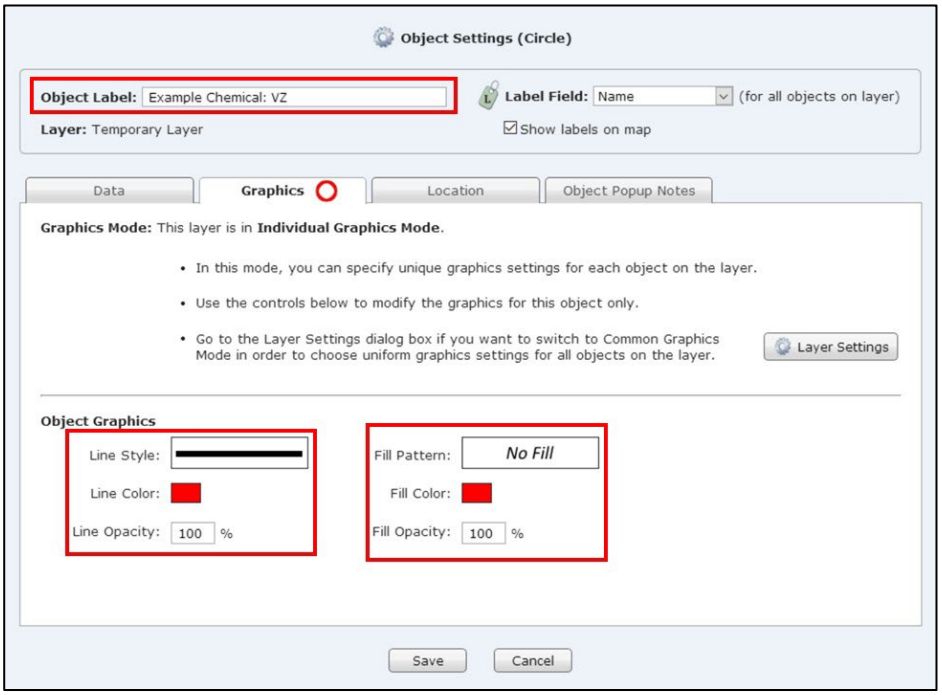


Figure 34: MARPLOT- VZ Settings

Retrieving Population Data

Once a VZ has been established as a layer on MARPLOT the assessor will be able to obtain the census data located inside the selected area. To do this, click the VZ circle so that everything inside becomes highlighted, then click the people icon (located in the 'Search and Get Info' section) and select 'Inside Selected Objects'. Once this has been completed, the US Census Data will appear. ***This information will need to be entered into the chemical report notes section (Figure 22).***

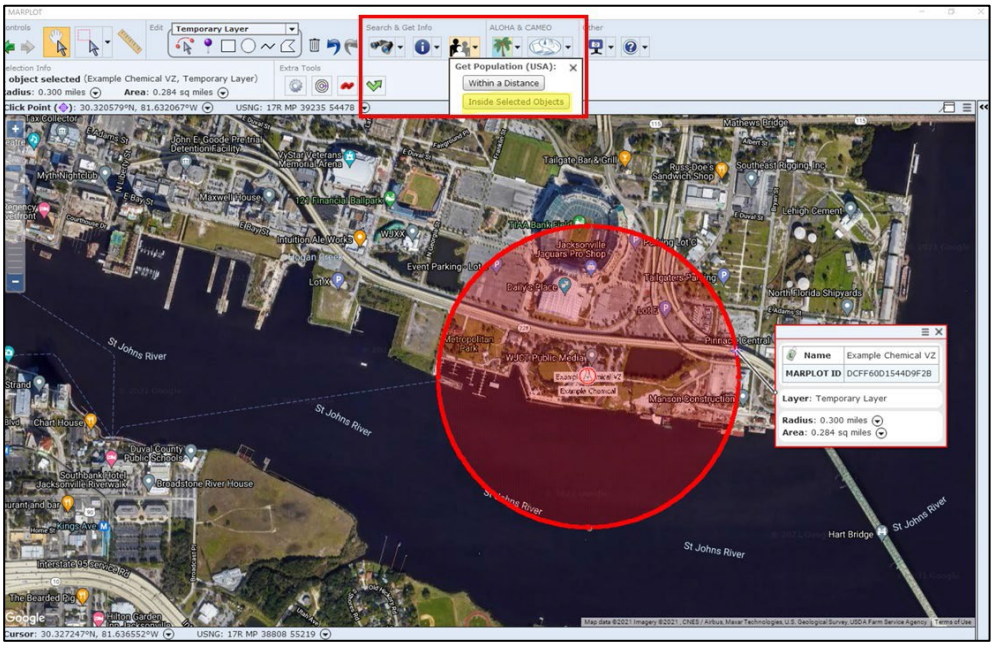


Figure 35: MARPLOT- Retrieve Population Data

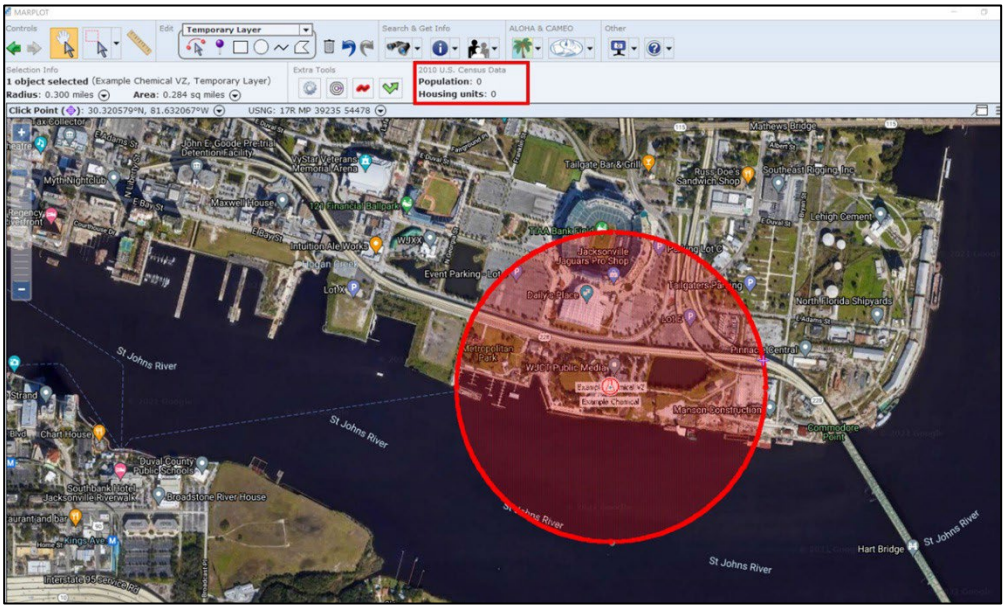


Figure 36: MARPLOT- Census Data

Saving Vulnerability Zone Map

Once the VZ map has been created, it needs to be saved because it will need to be uploaded into the *CAMEO Data Manager*. When saving the map, the file name needs to be like the example below. To save the VZ map, under the 'Other' section in *MARPLOT* select the 'Take a Screenshot icon' and select 'save map area to image file'; saving the file somewhere it can be retrieved later.

SERC#number-Facility name-Chemical name-VZmap

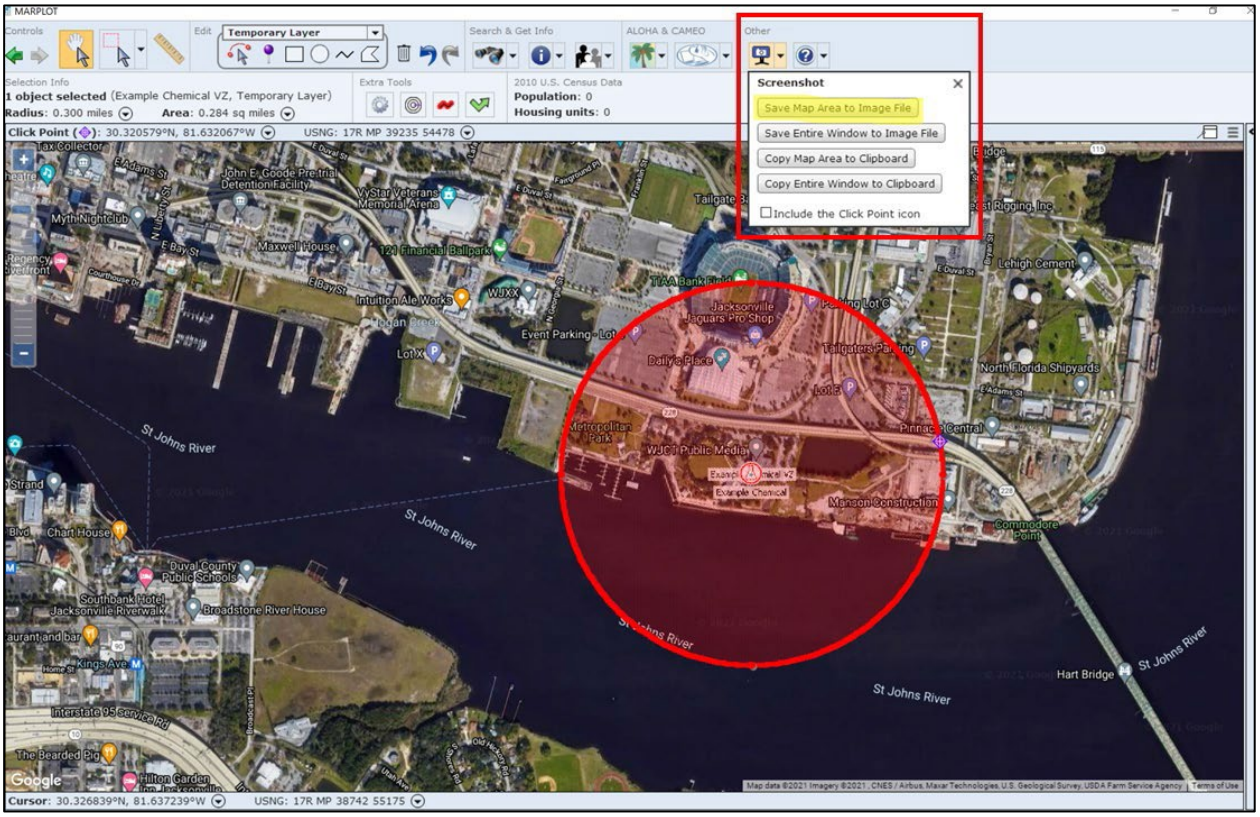


Figure 37: MARPLOT- Saving Map

Editing Map with Vulnerability Zone Information

Once the map has been saved it can be altered to contain specific information. While there are multiple systems that can be used to complete this process, for the purpose of this guide the steps will be detailed using PowerPoint.

Once PowerPoint has been opened to a blank presentation, delete the title and subtitle text boxes, and drag the map image file into the PowerPoint slide (resize as needed). Once the image file is in the slide, add a text box with the fill settings set to white, in the textbox write the SERC #-Facility name VZ Map on line 1, on line two type Vulnerability Zone: (Estimated Threat Zone from the Data Manager).

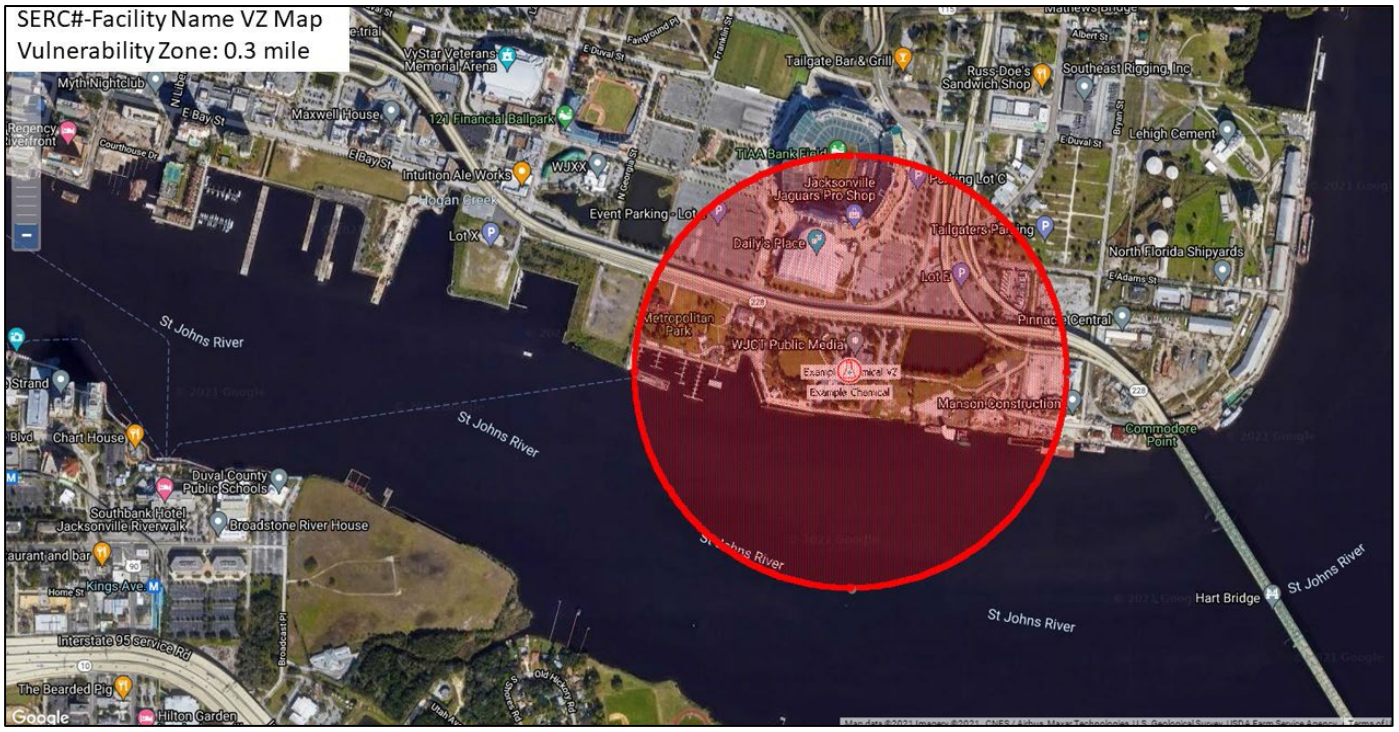


Figure 38: VZ Map Information

Once completed, save the image file to match the file name used earlier (*SERCnumber-Facility name-chemical name-VZmap)* as a PNG file using the ***SAVE AS*** option in PowerPoint.

Note: if there is extra white space from the PowerPoint slide it can be cropped out once the file has been saved and reopened as an image but is not required.

Facility CAMEO Report Finalization and Exportation

Facility Finalization

Uploading Attachments

The final portion of the facility report is to upload all signed documents and maps for each specific facility. On the facility information page under attachments is a button to 'Add Attachment'. Once an attachment has been added, the file name will appear in a box.

Note this file name will appear exactly how the file was saved to the computer. It is for this reason; files should be saved using a specific file name. As in earlier sections the file name must be laid out as *SERC#Number-Facility Name-Document Title*.

The documents that should be included in the attachments.

1. Hazard Analysis Site Certification Form
2. Statement of Determination (if applicable)
3. Facility Map
4. Chemical Vulnerability Map
5. Site Plans (If provided by the facility)

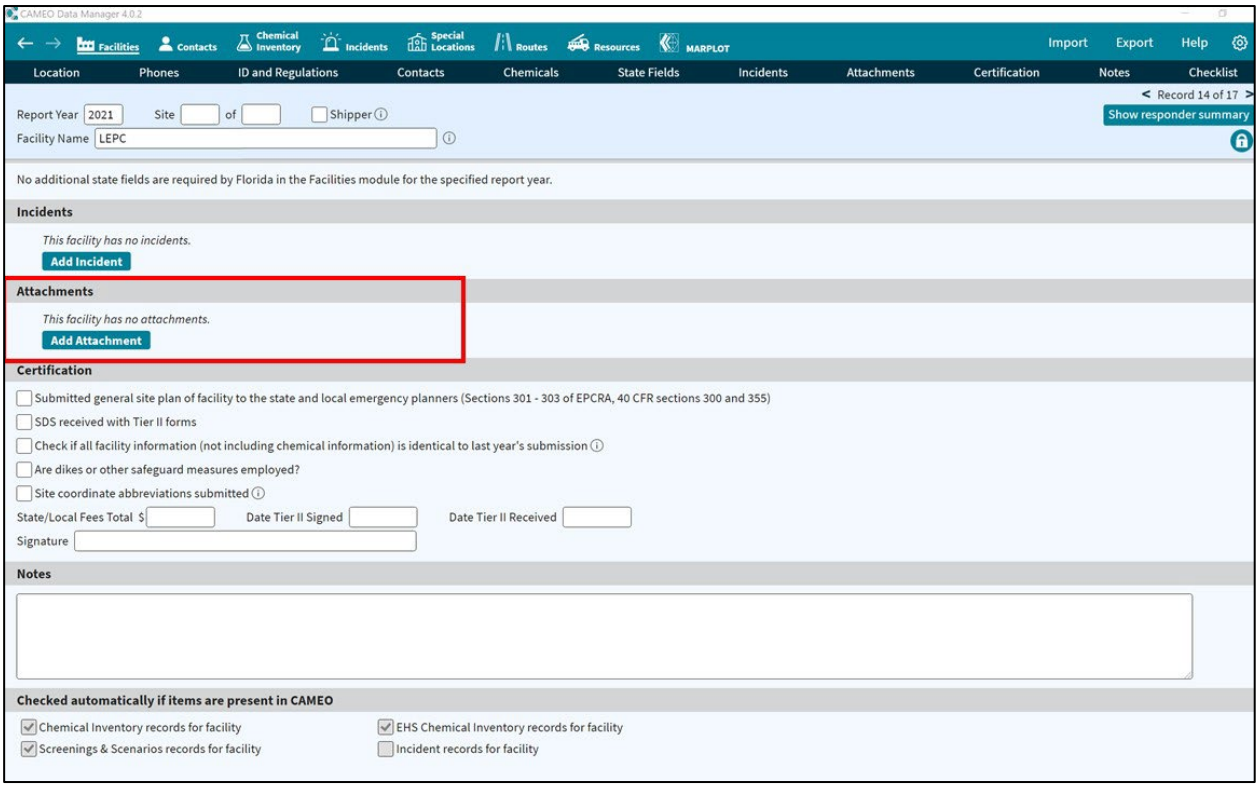


Figure 39: Adding Attachments

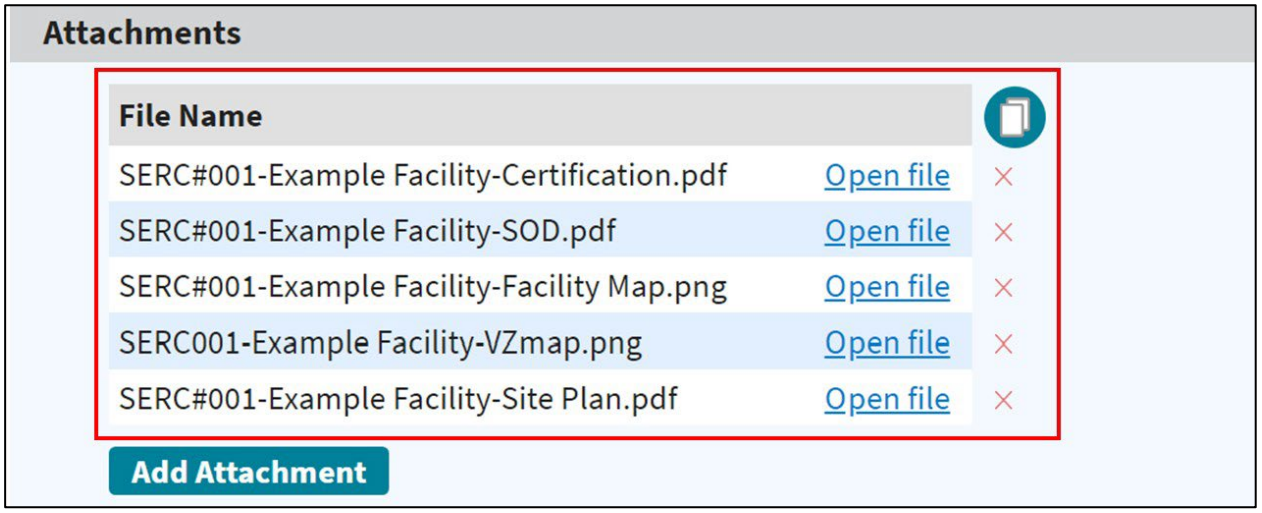


Figure 40: Attachments

Finalization

Once all steps have been completed for each facility and each facility has all the required information for Section 302 EHS chemicals for the grant cycle, the CAMEO report for a specific county is now complete and is ready to be exported.

Exporting

Now that the CAMEO reports have been completed, the assessed county specific facilities need to be exported and saved for upload to the FDEM SharePoint for approval. When exporting the county CAMEO report the file name will need to be saved as *Contract Year-Draft County Hazard Analysis.*

To export the CAMEO file, return to 'Facilities' page on the CAMEO Data Manager. And export the file, saving it to a place it can be retrieved later for submission to FDEM. Create File as a ZIP file, including all attachments and all records in the database.

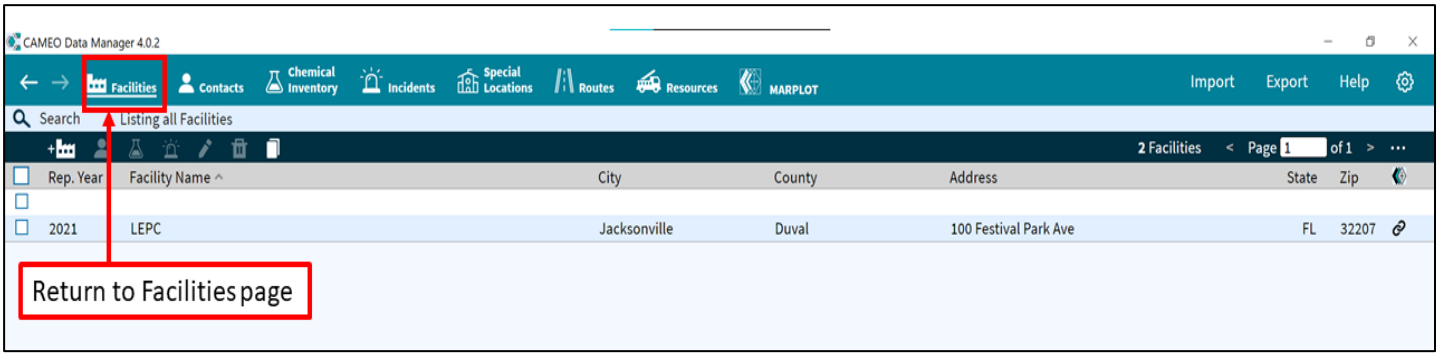


Figure 41: Returning to Facilities Page

Figure 42: Export CAMEO File

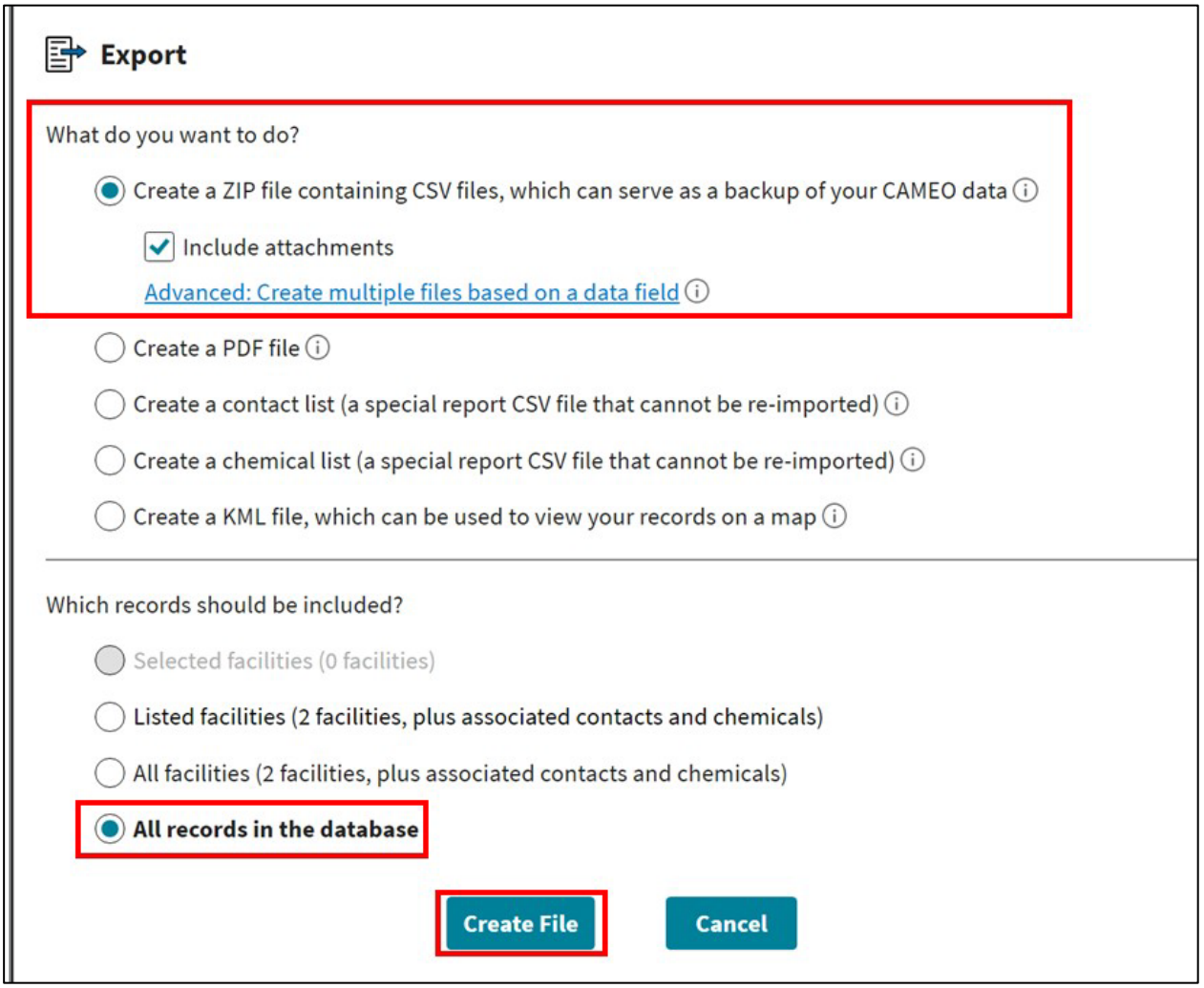


Figure 43: Export CAMEO File Information

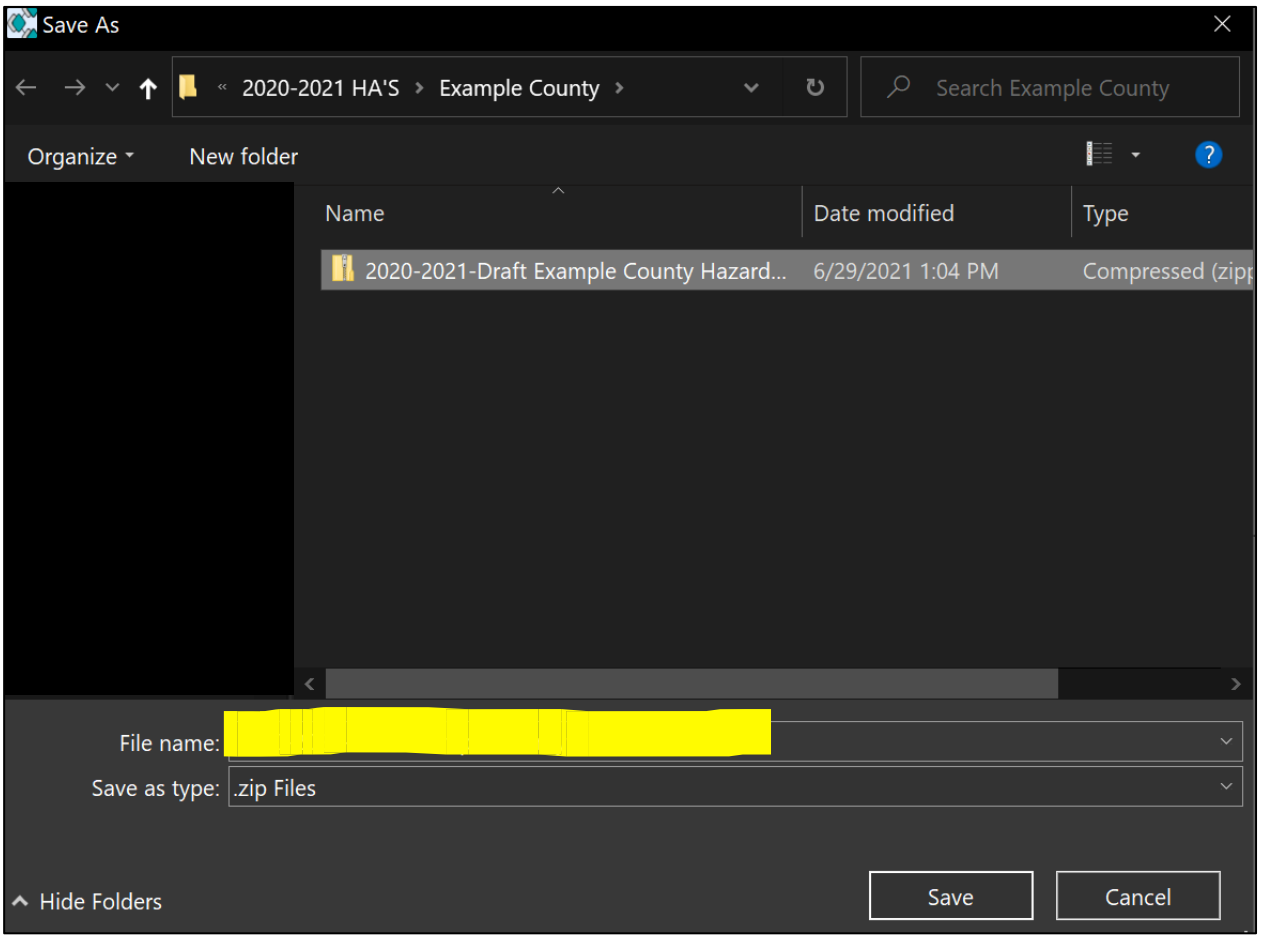


Figure 44: Saving exported CAMEO File

Submission FDEM

Submit draft CAMEO ZIP file to FDEM via the FDEM Salesforce site, once an FDEM grant manager has reviewed and approved the uploaded ZIP file change the file name from 'draft' to 'approved' and resubmit the ZIP file to the FDEM Salesforce folder.

If changes are requested, make the changes, re-export the assessed facilities and re-upload the file to the county specific SharePoint.

Clearing CAMEO Data Manager

When the file has been exported from the CAMEO Data Manager, it is possible to delete all records and start from scratch. This is beneficial because it allows the assessor to work specifically by county. If edits need to be made, import a saved CAMEO ZIP file and all the information will be reloaded.

Note: Do not delete files from CAMEO Data Manager unless the information has been exported and saved.

Appendices

1. **Assessment Scheduling Assessment Checklist**
2. **Assessment Checklist**
3. **Attachment K: Hazard Analysis Site Visit (SV) Certification Form**
4. **Attachment L: Statement of Determination Form**
5. **Attachment M: Close-Out Report Form**

Appendix 1: Scheduling Assessment Checklist

Item #	Task:	Notes
1	Using E-Plan Report: Verify Facility name, Company, Initial Filing Year, Address, Latitude, Longitude	
2	Verify SERC number with Attachment H of the HA Contract	
3	Using E-Plan Report: Verify Emergency Contact, Facility Emergency Coordinator, and Tier II Information Contact	
4	Using E-Plan Report: Chemical name, CAS #, Max Qty., Avg Daily Qty, max container size. *All quantities and amounts are in pounds (lbs).	
5	Request site maps the facility may have. (These can be paper or digital copies)	
6	Schedule Date and Time with Facility for Assessment	

Appendix 2: Facility Assessment Checklist

Pre-Assessment Meeting		
Item #	**Task:**	**Notes**
1	Speak with facility representative about the Hazard Analysis Assessment. What needs to view during the assessment, what is created using CAMEO and MARPLOT, and how they can retrieve the information once it has been approved	
2	Using E-Plan: Verify the maximum occupancy	
3	Has the facility provided a copy of their Tier II report to their local fire department?	
Assessment		
1	Verify the location of all EHS chemicals. Making note of any co-located chemicals, emergency notification systems (sirens, warning lights and windsoxs)	
2	Verify the size of the EHS storage containers and compare the information to the E-plan report. Verify Max amount, largest container size and Avg. Daily amounts	
3	Identify the type of container used to store EHS chemicals i.e., tanks, drums, cylinders	
Post Assessment Meeting		
1	While conducting the assessment, if any Section 302 Chemical has been brought onsite or taken off site (and not a seasonal product) have the facility representative complete a Statement of Determination (SOD) Form	
2	Review the information that has been gathered during the assessment with the facility representative	
3	Complete the Hazard Analysis Site Visit (SV) Certification Form	

Appendix 3: Attachment K-Hazard Analysis Site Visit (SV) Certification Form

Attachment K

Hazards Analysis Site Visit (SV) Certification Form

2023-2024 Hazards Analysis Grant

FACILITY NAME

STREET ADDRESS, CITY & ZIP CODE

COUNTY

SERC ID #

NAME OF FACILITY REPRESENTATIVE

FACILITY REPRESENTATIVE SIGNATURE

DATE SIGNED

SITE VISIT PERFORMED BY

SITE VISIT DATE

SIGNATURE

The Individuals signing above certify that a Hazards Analysis Site Visit was conducted on the date listed above.

NOTES

☐ Check if facility representative was informed about using E-Plan for EPCRA Tier II on-line filing. (https://erplan.net/eplan/login.htm)

Appendix 4: Attachment L- Statement of Determination Form

ATTACHMENT L
Statement of Determination
(Check Only One)

☐ **Exempt from Reporting for Filing Year** _____
(Due to Chemicals Being Removed or Under Threshold for the Filing Year)

☐ **Deregistration**
(Facility Decommissioned)

SITE INSPECTION DATE:

FACILITY NAME:					
PHYSICAL ADDRESS, CITY & ZIP:					
LEPC:		**COUNTY:**		**SERC #**	

SECTIONS 302-303	☐ Extremely Hazardous Substance(s) EHSs ***WERE*** present on-site during the current filing year, but only in amounts below the established Threshold Planning Quantities (TPQ). ***AS OF THIS DATE:***	**DATE**
	☐ EHSs ***WERE*** present on-site during the during the current filing year.	**DATE**
	☐ ***NO*** EHSs ***WERE*** present on-site during the current filing year. ***ALL EHSs WERE REMOVED AS OF THIS DATE:***	
SECTIONS 311 - 312	☐ Extremely Hazardous Substance(s) EHSs ***WERE*** present on-site during the current filing year, but only in amounts below the established Threshold Planning Quantities (TPQ). ***AS OF THIS DATE:***	**DATE**
	☐ EHSs ***WERE*** present on-site during the during the current filing year.	**DATE**
	☐ ***NO*** EHSs ***WERE*** present on-site during the current filing year. ***ALL EHSs WERE REMOVED AS OF THIS DATE:***	
SECTION 313	☐ Not within covered NAICS Codes.	
	☐ Within covered NAICS Codes, but less than ten (10) employees.	
	☐ Within covered NAICS Codes, but ***NO*** Section 313 chemicals ***WERE*** present on-site during the current filing year. ***ALL SECTION 313 CHEMICALS WERE REMOVED AS OF THIS DATE:***	**DATE**
	☐ Within covered NAICS Codes, and Section 13 chemicals ***WERE*** present on-site during the current filing year, but only in amounts below the established Threshold Planning Quantities (TPQ). ***AS OF THIS DATE:***	**DATE**

OTHER	**CLOSED FACILITY** ☐ YES ☐ NO	**CHEMICALS REMOVED** ☐ YES ☐ NO	**CHEMICALS BELOW ESTABLISHED TPQs** ☐ YES ☐ NO	**FACILITY CLOSED/CHEMICALS REMOVED BY DATE:**
	NEW FACILITY ☐ YES ☐ NO	**DATE EHS(s) WERE ON-SITE:**		
		DATE EHS(s) EXCEEDED THE ESTABLISHED TPQ:		

Further Explanation if Necessary:

Certification: ***(Read and Sign After Completing All Applicable Sections)***

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this page, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

_____
Printed Name of Owner/Operator OR Owner/Operator's Authorized Representative

_____ _____
Signature ***Date Signed***

By signing this Form, I certify to the best of my knowledge and belief that the information reported is in accordance with the terms and conditions of this Agreement.

_____ _____
Signature of LEPC Coordinator/County Official or Authorized Representative ***Date Signed***

45