

Chemical Security Assessment Tool (CSAT) 2.0 Top-Screen Instructions

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Homeland
Security



Table of Contents

Top-Screen Requirements.....1

- Chemical Facility Anti-Terrorism Standards (CFATS)..... 1
 - Do I Need to Submit a Top-Screen?..... 1
 - What If I Can't Submit on Time?..... 1
 - Who Can Fill Out a Top-Screen? 1
 - Who Can Submit a Top-Screen? 1
 - What Should I Expect After I Submit a Top-Screen?..... 1

Instructions for Top-Screen 3

- CFATS Excluded Facility..... 3
 - Q1.10.010 MTSA Exclusion 3
 - Q1.10.020 Public Water Systems Exclusion 3
 - Q1.10.030 Treatment Works Exclusion 3
 - Q1.10.040 DoD Exclusion 3
 - Q1.10.050 DOE Exclusion 3
 - Q1.10.060 NRC Exclusion 3
- Facility Attributes 5
 - Q1.20.010 Facility Topography..... 5
- Chemical of Interest (COI) Selection 5
 - Q1.30.010 COI at the Facility 5
- Security Issue Identification 6
 - Screening Threshold Quantity (STQ) and Minimum Concentration 6
 - Q1.40.010 Sabotage..... 6
 - Q1.40.020 Theft/Diversion..... 6
 - Q1.40.030 Release..... 6
- Sabotage..... 7
 - Q1.50.010 Transportation - Rail..... 7
 - Q1.50.020 Quantity and Concentration by Rail 7
 - Q1.50.030 Transportation - Road 7
 - Q1.50.040 Quantity and Concentration by Road..... 7
- Theft/Diversion..... 8
 - Bulk Transportation Packaging 8
 - Q1.60.010 Transportation Packaging 4,000 lbs or More..... 8
 - Q1.60.020 Transportation Packaging 4,000 lbs or more - Rail 8
 - Q1.60.030 COI Quantity and Concentration by Rail..... 8
 - Q1.60.040 Transportation Packaging 4,000 lbs or more - Road 8
 - Q1.60.050 COI Quantity and Concentration by Road..... 9
 - Q1.60.055 Transportation Packaging Less than 4,000 lbs..... 9
 - Q1.60.060 Concentration and Quantity Transportation Packaging – Less than 4,000 lbs 9
 - Q1.60.070 Shipping..... 9
- Release-Toxic 10
 - Vessel 10
 - Q1.70.010 Total Onsite Quantity 10
 - Q1.70.020 Circle 1 Largest Quantity Location 10



Q1.70.030 Circle 1 Details 10

Q1.70.070 Circle 2 Largest Quantity Location 11

Q1.70.080 Circle 2 Details 11

Release-Flammable..... 12

 National Fire Protection Association (NFPA) Flammability Hazard Rating 12

 Vessel 12

 Q1.80.010 Total Onsite Quantity 12

 Q1.80.020 Container 1 Largest Quantity Location..... 12

 Q1.80.030 Container 1 Details 12

 Q1.80.070 Container 2 Largest Quantity Location..... 13

 Q1.80.080 Container 2 Details 13

Release-Explosive..... 14

 Vessel 14

 Q1.90.010 Total Onsite Quantity 14

 Q1.90.020 Circle 1 Largest Quantity Location 14

 Q1.90.030 Circle 1 Details 14

 Q1.90.070 Circle 2 Largest Quantity Location 14

 Q1.90.080 Circle 2 Details 14

Addendum A – Sabotage 15

 Calculating Screening Threshold Quantity (STQ) or Minimum Concentration 15

Addendum B – Theft/Diversions 16

 Calculating Screening Threshold Quantity (STQ) or Minimum Concentration 16

Addendum C – Release..... 18

 Calculating Screening Threshold Quantity (STQ) or Minimum Concentration 18

Acronym List..... 21



Top-Screen Requirements

Chemical Facility Anti-Terrorism Standards (CFATS)

On December 18, 2014, the President signed into law the Protecting and Securing Chemical Facilities from Terrorist Attacks Act of 2014 (“CFATS Act of 2014”) providing long term authorization for the CFATS program. The CFATS Act of 2014 codified the Department’s authority to implement the CFATS program into the Homeland Security Act of 2002. (See 6 USC §621 et. seq.)

Section 550 of Public Law 109-295 previously provided (and the CFATS Act of 2014 continues to provide) the Department with the authority to identify and regulate the security of high-risk chemical facilities using a risk-based approach. On April 9, 2007, the Department issued the CFATS Interim Final Rule (IFR), implementing this statutory mandate. (See 72 FR 17688.)

Do I Need to Submit a Top-Screen?

If your facility possesses any chemical of interest (COI) on the [CFATS Appendix A: DHS Chemicals of Interest List](#) (6 CFR Part 27, Final Rule, Appendix A) at or above the listed screening threshold quantity (STQ) for any applicable security issue and your facility is not excluded, you must complete and submit a Top-Screen within 60 days of coming into possession of the COI. The Top-Screen is an easy-to-use on-line questionnaire available through the Chemical Security Assessment Tool (CSAT) system.

After you are registered in the CSAT system, the system gives you **60 calendar days** to complete and submit the Top-Screen.



If after submitting a Top-Screen, your facility comes into possession of additional COI listed on Appendix A at or above the listed STQ(s) or makes a material modification, your facility must complete and submit an updated Top-Screen to DHS within 60 calendar days of the material modification. (See 6 CFR § 27.210(d).)

What If I Can't Submit on Time?

A user with a Submitter role can request a due date extension to complete and submit the Top-Screen Survey in the CSAT system.

Upon receipt of the extension request, DHS will review all relevant information and notify your facility of its decision through the CSAT system.

Who Can Fill Out a Top-Screen?

A user with the Preparer or Submitter role can fill out a Top-Screen. However, only a Submitter will be able to submit the Top-Screen to DHS, once it is completed.



The Authorizer and Reviewer role can review the survey information but cannot edit it.

Who Can Submit a Top-Screen?

A Submitter, who is designated by the facility’s Authorizer, can submit a Top-Screen to DHS through the CSAT system in accordance with 6 CFR § 27.200(b) (3).

After the Submitter submits the Top-Screen, all users assigned to the facility will have access to a PDF version of the survey.



The Submitter may change / edit the submitted Top-Screen by using the “Update Top-Screen” feature in the CSAT system. This will open a copy of the last submitted Top-Screen that can be edited. This Top-Screen will be due, to DHS, 60 calendar days after using the “Update Top-Screen” feature in the CSAT system.

What Should I Expect After I Submit a Top-Screen?

After receiving the Top-Screen survey, DHS will make a determination whether the facility is or is not high-risk. The Authorizer and Submitter will receive an email notification that a new letter, with the results, is ready for their review and acknowledgement in the CSAT system.



If your facility is found to be high-risk, you will be notified by the CSAT system to submit a Security Vulnerability Assessment (SVA) / Site Security Plan (SSP) through the CSAT system within **120 calendar days** of the high-risk notification. If you have previously submitted an SVA/SSP, you may be required to review and revise your SVA/SSP, if appropriate



Instructions for Top-Screen

CFATS Excluded Facility

In this section, you can notify DHS if you are an excluded facility from the CFATS program. If you are an excluded facility, you are not required to fill out a Top-Screen, but may choose to submit a Top-Screen to let DHS know that you are an excluded facility. A Facility that selects one or more of the following exclusions will only have access to complete this section of the Top-Screen.

Q1.10.010 MTSA Exclusion

When answering the questions in this Top-Screen, the facility should only report a chemical of interest (COI) that is in portions of the facility not regulated under the Maritime Transportation Security Act (MTSA).

Select **Yes** if your facility is regulated under the Maritime Transportation Security Act (MTSA) of 2002, **AND** enter your facility's MTSA identifier in the text box. The MTSA identifier is found in the letter received from the United States Coast Guard when the facility security plan is approved. The typical format for the MTSA identifier is 8 characters in length (5 alphabetic followed by 3 numeric with no punctuation). [Public Law 107-295; 116Stat.2064].

Select **No** if your facility possesses a COI in a quantity at or above the applicable screening threshold quantity (STQ) in a portion of the facility that is outside an area that is regulated under MTSA.

Q1.10.020 Public Water Systems Exclusion

When answering the questions in this Top-Screen, the facility should only report COI that is not used for the purposes of the excluded public water system.

Select **Yes** if all COI at or above the STQ is used of a Public Water System, as defined by Section 1401 of the Safe Drinking Act (42 U.S.C 300f), **AND** enter your facility's Environmental Protection Agency (EPA) identifier in the text box.

Select **No** if your facility possesses a COI in a quantity at or above the applicable STQ that is not used for the purpose of the excluded public water system.

Q1.10.030 Treatment Works Exclusion

When answering the questions in this Top-Screen, the facility should only report COI that is not used for the purpose of the excluded treatment works.

Select **Yes** if all COI at or above the STQ is used of a Treatment Works, as defined in Section 212 of the Federal Water Pollution Control Act, (33 U.S.C. 1292), **AND** enter your facility's EPA identifier in the text box.

Select **No** if your facility possesses a COI in a quantity at or above the applicable STQ that is not used for the purpose of the excluded Treatment Works.

Q1.10.040 DoD Exclusion

Select **Yes** if your facility is owned or operated by the Department of Defense (DoD).

Otherwise, select **No**.

Q1.10.050 DOE Exclusion

Select **Yes** if your facility is owned or operated by the Department of Energy (DOE).

Otherwise, select **No**.

Q1.10.060 NRC Exclusion

When answering the questions in this Top-Screen, the facility should only report a COI that is in portions of the facility not regulated by the Nuclear Regulatory Commission (NRC).

The NRC exclusion applies to facilities where the Nuclear Regulatory Commission (NRC) imposes significant security requirements and regulates the safety and security of the majority of the facility, not just a few radioactive sources.



Select **Yes** if your facility is subject to regulation by the Nuclear Regulatory Commission (NRC), or by a State that has entered into an agreement with the NRC under Section 274(b) of the Atomic Energy Act of 1954 (42 U.S.C. 2021(b)) to protect against unauthorized access of any material, activity, or structure licensed by the NRC.

Otherwise, select **No**.



Facility Attributes

In this section, you are asked to describe the topography around your facility and indicate if your facility manufactures any chemicals.

Q1.20.010 Facility Topography

If your facility is regulated by the Environmental Protection Agency (EPA) Risk Management Plan (RMP) Rule, select the same topography that you reported to EPA.

Urban

Select **Urban** if the facility is surrounded by many obstructions, such as buildings and trees, and/or is in rough, hilly terrain.

Rural

Select **Rural** if the facility is in an area with generally flat terrain and is surrounded by few or no obstructions, such as buildings and trees.

If your facility is not regulated by the RMP rule and the terrain surrounding your facility differs depending on the approach to your facility, select the topography that is most representative of the facility's location. If you are still unsure, select Rural.

Chemical of Interest (COI) Selection

In this section, you will select all of the CFATS Appendix A chemicals at or above the screening threshold quantity (STQ) that your facility possesses.

If your facility does not possess any COI, you are not required to fill out a Top-Screen, but may choose to submit a Top-Screen with "Facility has no Chemical of Interest (COI) to report."

Q1.30.010 COI at the Facility

Select all the COI at or above the STQ, as described in [CFATS Appendix A: DHS Chemicals of Interest List](#) (6 CFR Part 27, Appendix A), that the facility possesses.



See the CSAT Survey Application User Manual for instructions on selecting COI.



For each COI you select in this question, the CSAT system will ask for confirmation that the facility holds the COI at or above the STQ and minimum concentration for each applicable security issue. If you select **No**, the CSAT system will ask no further questions about that COI.



Security Issue Identification

In this section, you are asked the specific security issue questions with applicable screening threshold quantity (STQ) and minimum concentration for each chemical of interest (COI) you selected in Q1.30.010. Each COI may have one or more security issues associated with it. Depending on your answers, you may need to answer additional questions to complete your Top-Screen.

Screening Threshold Quantity (STQ) and Minimum Concentration

The STQ and minimum concentration are the quantity and concentration of a COI upon which a facility's obligation to complete and submit a Top-Screen under 6 CFR 27.200(b)(2) is based. STQs and minimum concentrations are listed in [Appendix A](#) to 6 CFR Part 27. More information on how to calculate your COI quantity can be found in the regulatory text, **6 CFR §§ 27.203 and 27.204**.



For more information on how to calculate STQ for COI, reference **6 CFR §§ 27.203 and 27.204** or the [Addendums](#) at the end of the CSAT Top-Screen Instructions.

Q1.40.010 Sabotage

 *If you selected a COI in Q1.30.010 that is a sabotage security issue, you will be asked this question.*

Select **Yes** if the COI is shipped from the facility and meets or exceeds the STQ and minimum concentration for sabotage security issue.

Otherwise, select **No**.

See [Addendum A](#) in this document for further assistance in calculating STQ and minimum concentration for a COI that has sabotage as a security issue.

Q1.40.020 Theft/Diversions

 *If you selected a COI in Q1.30.010 that is a theft/diversion security issue, you will be asked this question.*

Select **Yes** if the COI at your facility meets or exceeds the STQ and minimum concentration for the theft/diversion security issue and is in transportation packaging.

Otherwise, select **No**.

See [Addendum B](#) in this document for further assistance in calculating STQ and minimum concentration for a COI that has theft/diversion as a security issue.

Q1.40.030 Release

 *If you selected a COI in Q1.30.010 that is a release security issue, you will be asked this question.*

Select **Yes** if the COI at your facility meets or exceeds the STQ and minimum concentration for the release security issue.

Otherwise, select **No**.

See [Addendum C](#) in this document for further assistance in calculating STQ and minimum concentration for a COI that has release as a security issue.



Sabotage

This section will only be required for chemicals of interest (COI) for which you selected **Yes** in Q1.40.010. Depending on your answers, some questions will remain hidden and will not need to be completed.

Q1.50.010 Transportation - Rail

Select **Yes** if your facility ships the COI by rail.
Otherwise, select **No**.



*If you select **Yes**, Question Q1.50.020 will appear.
Otherwise you will be skipped to Question Q1.50.030.*

Q1.50.020 Quantity and Concentration by Rail



*If you selected **Yes** in Q1.50.010, you **MUST** answer this question.*

Enter the largest quantity and concentration of the COI shipped offsite in a single railcar from your facility.

Quantity

Enter a numerical value to indicate the largest quantity of COI in pounds (lbs) that is shipped offsite from your facility in a single railcar. The answer must be a positive integer with no decimal places or commas. If the COI is in a mixture, include the total weight of the mixture.

Concentration

Enter a numerical value to indicate the concentration (expressed as a weight percentage) of the COI of the largest quantity that is shipped offsite from your facility in a single railcar. The answer may have up to two decimal places and cannot be greater than 100%. For example, if your COI concentration is 54.545% enter 54.55.

Q1.50.030 Transportation - Road

Select **Yes** if your facility ships the COI by road.
Otherwise, select **No**.



*If you select **Yes**, Question Q1.50.040 will appear.
Otherwise you are finished with the question set.*

Q1.50.040 Quantity and Concentration by Road



*If you selected **Yes** in Q1.50.030, you **MUST** answer this question.*

Enter the largest quantity and concentration of the COI shipped offsite in a single vehicle.

Quantity

Enter a numerical value to indicate the largest quantity of COI in pounds (lbs) that is shipped offsite from your facility in a single vehicle. The answer must be a positive integer with no decimal places or commas. If the COI is in a mixture, include the total weight of the mixture.

Concentration

Enter a numerical value to indicate the concentration (expressed as a weight percentage) of the COI of the largest quantity that is shipped offsite from your facility in a single vehicle. The answer may have up to two decimal places and cannot be greater than 100%. For example, if your COI concentration is 54.545% enter 54.55.



Theft/Diversions

This section will only be required for chemicals of interest (COI) for which you selected **Yes** in Q1.40.020. Depending on your answers, some questions will remain hidden and will not need to be completed.

Bulk Transportation Packaging

Bulk transportation containers include tank cars, barges, railcars, and other large storage containers that hold 4,000 pounds or more of COI and that can be placed on or hitched to a vehicle to be removed from a site.

Q1.60.010 Transportation Packaging 4,000 lbs or More

Select **Yes**, if your facility has 4,000 lbs or more of the COI in a single transportation package such as a tank car, railcar, and/or other single large storage container that could be placed on or hitched to a vehicle and removed from the facility. Do not count the weight of the packaging in determining the weight of the COI.

Otherwise, select **No**.



*If you select **Yes**, Questions Q1.60.020 and Q1.60.040 will appear. Otherwise you will be skipped to Question Q1.60.055.*

Q1.60.020 Transportation Packaging 4,000 lbs or more - Rail



*If you selected **Yes** in Q1.60.010, you **MUST** answer this question.*

Select **Yes** if the single transportation package, with 4,000 lbs or more of the COI, could be placed on or hitched to a vehicle and removed by rail.

Otherwise, select **No**.



*If you select **Yes**, Question Q1.60.030 will appear. Otherwise you will be skipped to Question Q1.60.040.*

Q1.60.030 COI Quantity and Concentration by Rail



*If you selected **Yes** in Q1.60.020, you **MUST** answer this question.*

Enter the largest quantity and concentration of the COI in a single transportation package that can be removed by rail.

Quantity

Enter a numerical value to indicate the largest quantity of COI in pounds (lbs) that your facility holds in a single transportation package that can be removed by rail. The answer must be a positive integer with no decimal places or commas. If the COI is in a mixture, you must include the total weight of the mixture.

Concentration

Enter a numerical value to indicate the concentration (expressed as a weight percentage) of the COI of the largest quantity that your facility holds in a single transportation package that can be removed by rail. The answer may have up to two decimal places and cannot be greater than 100%. For example, if your COI concentration is 54.545% enter 54.55.

Q1.60.040 Transportation Packaging 4,000 lbs or more - Road



*If you selected **Yes** in Q1.60.020, you **MUST** answer this question.*

Select **Yes** if the single transportation package, with 4,000 lbs or more of the COI, could be placed on or hitched to a vehicle and removed by road.

Otherwise, select **No**.



*If you select **Yes**, Question Q1.60.050 will appear. Otherwise you will be skipped to Question Q1.60.055.*



Q1.60.050 COI Quantity and Concentration by Road

 If you selected **Yes** in Q1.60.040, you **MUST** answer this question.

Enter the largest quantity and concentration of the COI in a single transportation package that can be removed road.

Quantity

Enter a numerical value to indicate the largest quantity of COI in pounds (lbs) that your facility holds in a single transportation package that can be removed by road. The answer must be a positive integer with no decimal places or commas. If the COI is in a mixture, you must include the total weight of the mixture.

Concentration

Enter a numerical value to indicate the concentration (expressed as a weight percentage) of the COI of the largest quantity that your facility holds in a single transportation package that can be removed by road. The answer may have up to two decimal places and cannot be greater than 100%. For example, if your COI concentration is 54.545% enter 54.55.

Q1.60.055 Transportation Packaging Less than 4,000 lbs

Select **Yes**, if your facility has less than 4,000 pounds (lbs) of the COI in a single transportation package such as such as cylinders, barrels, drums and/or other less than 4,000 lbs transportation containers. Do not count the weight of the packaging in determining the weight of the COI.

Otherwise, select **No**.



If you select **Yes**, Questions Q1.60.060 will appear. Otherwise if you selected **Yes** in Q1.60.010 you will be skipped to Question Q1.60.070 or if you selected **No**, you are finished with the question set.

Q1.60.060 Concentration and Quantity Transportation Packaging – Less than 4,000 lbs

 If you selected **Yes** in Q1.60.055, you **MUST** answer this question.

Select the **Add button**, to report concentrations in transportation packaging that holds less than 4,000 pounds (lbs) per container. Continue to select **Add** to report additional quantities at different concentration ranges.



See the CSAT Survey Application User Manual for instructions in using the Add button, editing, or deleting information.

Concentration Range (weight %)

Select the concentration range that you are reporting. Start with the highest concentration range and work your way down to the lowest.

Total Onsite Quantity (lbs) for the Concentration Range (weight %)

Enter a numerical value to indicate the total quantity of COI in pounds (lbs) that your facility holds in non-bulk transportation packaging at the selected concentration range. The answer must be a positive integer with up to two decimal places. If the COI is in a mixture, you must include the total weight of the mixture.

Select Smallest Container Size Onsite

Select the smallest container, at your facility, from the list provided that it holds the COI for the concentration range you indicated.

Q1.60.070 Shipping

 If you selected **Yes** in Q1.60.010 or Q1.60.055, you **MUST** answer this question.

Select **Yes** if the COI is shipped from the facility.

Otherwise, select **No**.



Release-Toxic

This section will only be required for chemicals of interest (COI) for which you selected **Yes** in Q1.40.030. Depending on your answers, some questions will remain hidden and will not need to be completed.

Vessel

A vessel is defined as any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

Q1.70.010 Total Onsite Quantity

Enter a numerical value to indicate the total quantity in pounds (lbs) of COI that your facility holds. The answer must be a positive integer with no decimal places or commas. If the COI is in a mixture, include the total weight of the mixture. Do not include quantities that are attached to a vehicle incident to transportation.

- Design pressure or Maximum allowable working Pressure (MAWP)
- Location type

For example, if you have a railcar with COI in a concentration of 55% and a tank with COI in 35% in the circle, you will need to report each separately, since they vary in concentration.

Once you have completed adding each variation, you will need to select **I'M DONE**.

Q1.70.020 Circle 1 Largest Quantity Location

In this question, you are asked to use the Top-Screen geospatial tool to locate the area on your facility with the largest quantity of the COI. You will do this by placing a circle that contains the highest quantity of the COI. This area may include cylinders, single or multiple tanks and/or vessels. If the circle partially touches a container, count the full quantity of COI in the container. If the imagery is out of date, place the circle as close as possible to the correct location.



See the CSAT Survey Application User Manual for additional help with adding, editing or deleting information.

Name and Description of Storage

Enter text up to 200 characters to name and describe the storage for the specific COI you are reporting.

For example, "Tank 1 – pressure vessel".

Quantity (lbs)

Enter a numerical value to indicate the quantity of COI in pounds (lbs) in the storage you are reporting. The answer must be a positive integer with no decimal places or commas. If the COI is in a mixture, you must include the total weight of the mixture.

Concentration Range (%)

Select the concentration range that you are reporting. Start with the highest concentration range and work your way down to the lowest.



For oleum, report the concentration as the weight percent of sulfur trioxide.



See the CSAT Survey Application User Manual for additional help with the geospatial tool.

Q1.70.030 Circle 1 Details

Select **ADD** to begin entering the detailed information about the COI in the circle. If your circle includes multiple cylinders, tanks and/or vessels and they vary by any of the following, you will need to select **ADD** again to report each separately:

- Concentration range
- Physical state
- Process/storage Temperature
- Process/storage Pressure



Physical State

Select if the physical state of the COI is a gas, liquid, pressurized liquefied gas, or refrigerated liquefied gas.

Process / Storage Temperature (°F)

Enter the process/storage temperature of the COI in degrees Fahrenheit. In cases where the process/storage temperature is at or near ambient temperature, report the temperature as 68°F.

Process / Storage Pressure (psig)

Enter the process/storage pressure of COI in psig. In cases where typical process/storage pressure is ambient (e.g., atmospheric storage tanks), report the pressure as zero (0).

Design Pressure – Maximum Allowable Working Pressure (MAWP)

Report the design pressure or MAWP for the container. This information can generally be found in one of several locations:

1. Vessel/tank design specifications or drawings
2. Manufacturers data reports (ASME Form U-1)
3. Piping and instrumentation diagrams
4. On the vessel/tank nameplate

If none of these sources provide the required information, report a pressure that is 20% above the maximum operating pressure expected for the container.



Report the MAWP, if both design pressure and MAWP are known.

Location Type

Select if the COI is stored in a building, above grade, below grade, or underground.

Secondary Containment Present

If the physical state you selected is not a gas and the location type is in a building or uncovered, you will be asked if a secondary containment is present.

Select **Yes** if your facility has a secondary containment present where the COI is stored.

AND enter the AREA in square feet (ft²).

AND enter the Capacity in cubic feet (ft³).

Otherwise, select **No**.



If the area you identified in Question Q1.70.020 contains less than 80% of the total onsite quantity, you will have to answer question Q1.70.070 to identify a second largest quantity location and its subsequent questions.

Q1.70.070 Circle 2 Largest Quantity Location



To answer this question, follow the same instructions as Q1.70.020.

In this question, you are asked to use the Top-Screen geospatial tool to locate the area on your facility with the **second** largest quantity of the COI. You will do this by placing a circle that contains the second highest quantity of the COI. This area may include cylinders, single or multiple tanks and/or vessels. If the circle partially touches a container, count the full quantity of COI in the container. If the imagery is out of date, place the circle as close as possible to the correct location.

Q1.70.080 Circle 2 Details



To answer questions Q1.070.080, follow the same instructions Q1.70.030.



Release-Flammable

This section will only be required for chemicals of interest (COI) for which you selected **Yes** in Q1.40.030. Depending on your answers, some questions will remain hidden and will not need to be completed.

National Fire Protection Association (NFPA) Flammability Hazard Rating

DHS uses the flammability hazard ratings of 1, 2, 3 or 4 as defined in the National Fire Protection Association's (NFPA) Standard 704 – Standards System for the Identification of the Hazards of Materials for Emergency Response. Standard 704 can be accessed for free on the NFPA website (<http://www.nfpa.org/>) under Codes and Standards.

Vessel

A vessel is defined as any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

Q1.80.010 Total Onsite Quantity

Enter a numerical value to indicate the total quantity in pounds (lbs) of COI that your facility holds. The answer must be a positive integer with no decimal places or commas. Do not include quantities that are attached to a vehicle incident to transportation. If the COI is in a mixture use the following guidelines:

- If the COI is in an NFPA 4 mixture, count the total weight of the mixture towards the total onsite quantity.
- If the COI is in an NFPA 1-3 mixture and not in a fuel, count only the weight of the COI towards the total onsite quantity.
- If the COI is in an NFPA 1-3 fuel (e.g. gasoline, diesel, kerosene, or jet fuel) and stored in aboveground tank farms count the entire weight of the fuel towards the total onsite quantity.



See [Addendum C](#) in this document for further assistance.

Q1.80.020 Container 1 Largest Quantity Location

In this question, you are asked to use the Top-Screen Geospatial tool to place an X over the single container with the largest quantity of release-flammable COI located in your facility's geographical area. If the imagery is out of date, place the X as close as possible to the correct location.



See the CSAT Survey Application User Manual for additional help with the geospatial tool.

Q1.80.030 Container 1 Details

In this question, you are asked to **ADD** details for the COI marked by the X in Container 1.



See the CSAT Survey Application User Manual for additional help with adding, editing, or deleting information.

Name and Description

Enter text up to 200 characters to name and describe the storage for the specific COI you are reporting.

For example, "Tank 1 – pressure vessel".

National Fire Protection Association Flammability Hazard Rating (NFPA)

Select the flammability rating of the COI.

If you select a NFPA 1-3, you will be asked if the COI is in gasoline, diesel, kerosene, or jet fuel.

Flow Rate (BBL/H)

If you selected Gasoline as the COI mixture, provide the maximum flow rate into or out of the facility storage, measuring in barrels per hour (bbl/h). Enter a positive integer that is up to five (5) digits with no commas or decimal points.

Quantity (lbs)

Enter the quantity in pounds (lbs). The answer must be a positive integer with no decimal places or commas.



CALCULATION NOTES:

- If the COI is in an NFPA 4 mixture, enter the total weight of the mixture.
- If the COI is in an NFPA 1-3 mixture and not in a fuel, enter the only the weight of the COI.
- If the COI is in an NFPA 1-3 fuel (e.g. gasoline, diesel, kerosene, or jet fuel) and stored in aboveground tank farms, enter the total weight of the mixture.

Design Pressure – Maximum Allowable Working Pressure (MAWP)

Report the design pressure or MAWP for the container. This information can generally be found in one of several locations:

1. Vessel/tank design specifications or drawings
2. Manufacturers data reports (ASME Form U-1)
3. Piping and instrumentation diagrams
4. On the vessel/tank nameplate

If none of these sources provide the required information, report a pressure that is 20% above the maximum operating pressure expected for the container.



Report the MAWP if both design pressure and MAWP are known.

Location Type

Select if the COI is stored in a building, above grade, below grade, or underground.



If the area you identified in Question Q1.80.020 contains less than 80% of the total onsite quantity, you will have to answer question Q1.80.070 to identify a second largest quantity location and its subsequent questions.

Q1.80.070 Container 2 Largest Quantity Location



To answer this question, follow the same instructions as question Q1.80.020.

In this question, you are asked to use the Top-Screen Geospatial tool to place an X over a container with the second largest quantity of release-flammable COI located in your facility's geographical area. If the imagery is out of date, place the X as close as possible to the correct location.

Q1.80.080 Container 2 Details



To answer questions Q1.080.080, follow the same instructions as questions Q1.80.030.



Release-Explosive

This section will only be required for chemicals of interest (COI) for which you selected **Yes** in Q1.40.030. Depending on your answers, some questions will remain hidden and will not need to be completed.

Vessel

A vessel is defined as any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

Q1.90.010 Total Onsite Quantity

Enter a numerical value to indicate the total quantity in pounds (lbs) of COI that your facility holds. The answer must be a positive integer with no decimal places or commas. If the COI is in a mixture, include only the weight of the COI. Do not include quantities that are attached to a vehicle incident to transportation.

Q1.90.020 Circle 1 Largest Quantity Location

In this question, you are asked to use the Top-Screen Geospatial tool to place an X over the single location with the largest quantity of release-explosive COI located (e.g. bunker or magazine) in your facility's geographical area. If the imagery is out of date, place the X as close as possible to the correct location.



See the CSAT Survey Application User Manual for additional help with the geospatial tool.

Q1.90.030 Circle 1 Details

In this question, you are asked to **ADD** details for the COI marked by the X in Circle.



See the CSAT Survey Application User Manual for additional help with adding, editing, or deleting information.

Name and Description of Storage

Enter text up to 200 characters to name and describe the storage for the specific COI you are reporting.

For example, "Tank 1 – pressure vessel".

Quantity (lbs)

Enter the quantity in pounds (lbs). The answer must be a positive integer with no decimal places or commas.

If in a mixture include, only the weight of the COI.

Quantity of other explosives in the circle (lbs)

Enter the quantity of other co-located explosives in Circle 1 in pounds (lbs). The answer must be a positive integer with no decimal places or commas.

Location Type

Select if the COI is stored in a building / magazine, above grade, below grade, or underground.



If the area you identified in Question Q1.90.020 contains less than 80% of the total onsite quantity, you will have to answer question Q1.90.070 to identify a second largest quantity location and its subsequent questions.

Q1.90.070 Circle 2 Largest Quantity Location



To answer this question, follow the same instructions as question Q1.90.020.

In this question, you are asked to use the Top-Screen Geospatial tool to place an X over a location with the second largest quantity of release-explosive COI located in your facility's geographical area. If the imagery is out of date, place the X as close as possible to the correct location.

Q1.90.080 Circle 2 Details



To answer questions Q1.090.080, follow the same instructions as questions Q1.90.030.



Addendum A – Sabotage

Calculating Screening Threshold Quantity (STQ) or Minimum Concentration

The Department of Homeland Security identifies sabotage chemicals of interest (COI) as those that, if mixed with readily-available materials, have the potential to create significant adverse consequences for human life or health.

The table below provides a quick reference for the general rules in calculating Sabotage COI .

Security Issue	COI to Exclude from STQ	COI to Include in STQ	Minimum Concentration
Sabotage	27.203(a)	27.203(d)	27.204(c) ACG

Table 1: Summary of General Rules for Sabotage COI at 6 CFR Part 27

§ 27.203 Calculating the screening threshold quantity by security issue.

(a) General. In calculating whether a facility possesses a chemical of interest that meets the STQ for any security issue, a facility need not include chemicals of interest:

- (1) Used as a structural component;
- (2) Used as products for routine janitorial maintenance;
- (3) Contained in food, drugs, cosmetics, or other personal items used by employees;
- (4) In process water or non-contact cooling water as drawn from environment or municipal sources;
- (5) In air either as compressed air or as part of combustion;
- (6) Contained in articles, as defined in 40 CFR 68.3;
- (7) In solid waste (including hazardous waste) regulated under the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et. seq., except for the waste described in 40 CFR 261.33;
- (8) in naturally occurring hydrocarbon mixtures prior to entry of the mixture into a natural gas processing plant or a petroleum refining process unit. Naturally occurring hydrocarbon mixtures include condensate, crude oil, field gas, and produced water as defined in 40 CFR 68.3.

(d) Sabotage and Contamination Chemicals. A facility meets the STQ for a sabotage/contamination chemical of interest if it ships the chemical and is required to placard the shipment of that chemical pursuant to the provisions of subpart F of 49 CFR part 172.

§ 27.204 Minimum concentration by security issue.

(c) Sabotage and Contamination Chemicals. For each sabotage/contamination chemical of interest, a facility shall count the total quantity of all commercial grades of the chemical toward the STQ.



Addendum B – Theft/Diversions

Calculating Screening Threshold Quantity (STQ) or Minimum Concentration

The Department of Homeland Security (DHS) identifies Theft/Diversions chemicals of interest (COI) as follows:

- (A) Explosives (EXP)/Improvised Explosive Device Precursors (IEDP) COI as those that could be stolen or diverted and used as an explosive or to manufacture an improvised explosive device (IED).
- (B) Weapons of mass effect (WME) COI as those that could be stolen or diverted and used directly as WME.
- (C) Chemical Weapons (CW)/Chemical Weapons Precursors (CWPs) COI as those that could be stolen or diverted and used as CW or converted into CW.

The table below provides a quick reference for the general rules in calculating Theft/Diversions COI

Security Issue	COI to Exclude from STQ	COI to Include in STQ	Minimum Concentration
Theft/Diversions- EXP/IEDP	27.203(a)	27.203(c)	27.204(b)(3)
Theft/Diversions- WME	27.203(a)	27.203(c)	27.204(b)(2)
Theft/Diversions- CW/CWP	27.203(a)	27.203(c)	27.204(b)(1)

*Note: CUM 100g means a cumulative STQ of 100 g for those theft/diversion-CW/CWP COI being noted as CUM 100g. This is an aggregate amount for all such theft/diversion – CW/CWP COI, not a per-chemical STQ.

Table 2: Summary of General Rules for Theft/Diversions COI at 6 CFR Part 27

§ 27.203 Calculating the screening threshold quantity by security issue.

(a) General. In calculating whether a facility possesses a chemical of interest that meets the STQ for any security issue, a facility need not include chemicals of interest:

- (1) Used as a structural component;
- (2) Used as products for routine janitorial maintenance;
- (3) Contained in food, drugs, cosmetics, or other personal items used by employees;
- (4) In process water or non-contact cooling water as drawn from environment or municipal sources;
- (5) In air either as compressed air or as part of combustion;
- (6) Contained in articles, as defined in 40 CFR 68.3;
- (7) In solid waste (including hazardous waste) regulated under the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et. seq., except for the waste described in 40 CFR 261.33;
- (8) in naturally occurring hydrocarbon mixtures prior to entry of the mixture into a natural gas processing plant or a petroleum refining process unit. Naturally occurring hydrocarbon mixtures include condensate, crude oil, field gas, and produced water as defined in 40 CFR 68.3.

(b) Theft and Diversion Chemicals. In calculating whether a facility possesses an amount of a theft/diversion chemical of interest that meets the STQ, the facility shall only include theft/diversion chemicals of interest in a transportation packaging, as defined in



49 CFR 171.8. Where a theft/diversion-Chemical Weapons (CW) chemical is designated by “CUM 100g,” a facility shall total the quantity of all such designated chemicals in its possession to determine whether the facility possesses theft/diversion-CW chemicals that meet or exceed the STQ of 100 grams.

§ 27.204 Minimum concentration by security issue.

(b) Theft and Diversion Chemicals.

(1) Theft/Diversion-Chemical Weapons (CW) and Chemical Weapons Precursors (CWP Chemicals: Where a theft/diversion-CWC/CWP chemical of interest is not designated by “CUM 100g” in Appendix A, and the chemical is present in a mixture at or above the minimum concentration amount listed in the Minimum Concentration column of Appendix A to part 27, the facility shall count the entire amount of the mixture toward the STQ.

(2) Theft/Diversion-Weapon of Mass Effect (WME) Chemicals: If a theft/diversion-WME chemical of interest is present in a mixture at or above the minimum concentration amount listed in the Minimum Concentration column of Appendix A to part 27, the facility shall count the entire amount of the mixture toward the STQ.

(3) Theft/Diversion-Explosives/Improvised Explosive Device Precursor (EXP/IEDP) Chemicals. For each theft/diversion-EXP/IEDP chemical of interest, a facility shall count the total quantity of all commercial grades of the chemical toward the STQ, unless a specific minimum concentration is assigned in the Minimum Concentration column of Appendix A to part 27, in which case the facility should count the total quantity of all commercial grades of the chemical at the specified minimum concentration.



Addendum C – Release

Calculating Screening Threshold Quantity (STQ) or Minimum Concentration

The Department of Homeland Security (DHS) identifies release chemicals of interest (COI) as follows:

- (A) Toxic COI as those that have the potential to create a toxic cloud that would affect populations within and beyond a facility if intentionally released.
- (B) Flammable COI as those that have the potential to create a vapor cloud explosion that would affect populations within and beyond the facility, if intentionally released.
- (C) Explosive COI as those that have the potential to affect populations within and beyond the facility, if intentionally detonated.

The table below provides a quick reference for the general rules in calculating Release COI

Security Issue	COI to Exclude from STQ	COI to Include in STQ	Minimum Concentration
Release-Toxic	27.203(a)	27.203(b)(1)	27.204(a)(1)
	27.203(b)(2)	27.204(a)(1)	
Release- Flammable	27.203(a)	27.203(b)(1)	27.204(a)(2)
	27.203(b)(2)	27.204(a)(2)	
	27.203(b)(3)		
Release- Explosive	27.203(a)	27.203(b)(1)	27.204(a)(3)
	27.203(b)(2)	27.204(a)(3)	

Table 3: Summary of General Rules for Release COI at 6 CFR Part 27

§ 27.203 Calculating the screening threshold quantity by security issue.

(a) General. In calculating whether a facility possesses a chemical of interest that meets the STQ for any security issue, a facility need not include chemicals of interest:

- (1) Used as a structural component;
- (2) Used as products for routine janitorial maintenance;
- (3) Contained in food, drugs, cosmetics, or other personal items used by employees;
- (4) In process water or non-contact cooling water as drawn from environment or municipal sources;
- (5) In air either as compressed air or as part of combustion;
- (6) Contained in articles, as defined in 40 CFR 68.3;
- (7) In solid waste (including hazardous waste) regulated under the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et. seq., except for the waste described in 40 CFR 261.33;
- (8) in naturally occurring hydrocarbon mixtures prior to entry of the mixture into a natural gas processing plant or a petroleum refining process unit. Naturally occurring hydrocarbon mixtures include condensate, crude oil, field gas, and produced water as defined in 40 CFR 68.3.

(b) Release Chemicals.

(1) Release-Toxic, Release-Flammable, and Release-Explosive Chemicals. Except as provided in paragraphs (b)(2) and (b)(3), in calculating whether a facility possesses an amount that meets the STQ for release chemicals of interest, the facility shall only include release chemicals of interest:



- (i) In a vessel as defined in 40 CFR 68.3, in a underground storage facility, or stored in a magazine as defined in 27 CFR 555.11;
- (ii) In transportation containers used for storage not incident to transportation, including transportation containers connected to equipment at a facility for loading or unloading and transportation containers detached from the motive power that delivered the container to the facility;
- (iii) Present as process intermediates, by-products, or materials produced incidental to the production of a product if they exist at any given time;
- (iv) In natural gas or liquefied natural gas stored in peak shaving facilities; and
- (v) In gasoline, diesel, kerosene or jet fuel (including fuels that have flammability hazard ratings of 1, 2, 3, or 4, as determined by using National Fire Protection Association (NFPA) 704: Standard System for the Identification of the Hazards of Materials for Emergency Response [2007 ed.], which is incorporated by reference at 27.204(a)(2)) stored in aboveground tank farms, including tank farms that are part of pipeline systems;

(2) Release-Toxic, Release-Flammable, and Release-Explosive Chemicals. Except as provided in paragraph (c)(2)(i), in calculating whether a facility possesses an amount that meets the STQ for release-toxic, release-flammable, and release-explosive chemicals, a facility need not include release-toxic, release-flammable, or release-explosive chemicals of interest that a facility manufactures, processes or uses in a laboratory at the facility under the supervision of a technically qualified individual as defined in 40 CFR 720.3.

(i) This exemption does not apply to specialty chemical production; manufacture, processing, or use of substances in pilot plant scale operations; or activities, including research and development, involving chemicals of interest conducted outside the laboratory.

(ii) [Reserved]

(3) Propane. In calculating whether a facility possesses an amount that meets the STQ for propane, a facility need not include propane in tanks of 10,000 pounds or less.

§ 27.204 Minimum concentration by security issue.

(a) Release Chemicals

(1) Release-Toxic Chemicals. If a release-toxic chemical of interest is present in a mixture, and the concentration of the chemical is equal to or greater than one percent (1%) by weight, the facility shall count the amount of the chemical of interest in the mixture toward the STQ. If a release-toxic chemical of interest is present in a mixture, and the concentration of the chemical is less than one percent (1%) by weight of the mixture, the facility need not count the amount of that chemical in the mixture in determining whether the facility possesses the STQ. Except for oleum, if the concentration of the chemical of interest in the mixture is one percent (1%) or greater by weight, but the facility can demonstrate that the partial pressure of the regulated substance in the mixture (solution) under handling or storage conditions in any portion of the process is less than 10 millimeters of mercury (mm Hg), the amount of the substance in the mixture in that portion of a vessel need not be considered when determining the STQ. The facility shall document this partial pressure measurement or estimate.

(2) Release-Flammable Chemicals. If a release-flammable chemical of interest is present in a mixture in a concentration equal to or greater than one percent (1%) by weight of the mixture, and the mixture has a National Fire Protection Association (NFPA) flammability hazard rating of 4, the facility shall count the entire amount of the mixture toward the STQ. Except as provided in § 27.203(b)(1)(v) for fuels that are stored in aboveground tank farms (including farms that are part of pipeline systems), if a release-flammable chemical of interest is present in a mixture in a concentration equal to or greater than one percent (1%) by weight of the mixture, and the mixture has a National Fire Protection Association (NFPA) flammability hazard rating of 1, 2, or 3, the facility need not count the mixture toward the STQ. The flammability hazard ratings are defined in NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response [2007 ed.]. The Director of the Federal Register approves the incorporation by reference of this standard in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy of the incorporated standard from the National Fire Protection Association at 1 Batterymarch Park, Quincy, MA 02169-7471 or <http://www.nfpa.org>. You may inspect a copy of the incorporated standard at the Department of Homeland Security, 1621 Kent Street, 9th Floor, Rosslyn VA (please call 703-235-0709) to make an appointment or at the or at the National Archives and Records Administration (NARA). For information on the availability of material at NARA, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. If a release-flammable chemical of



interest is present in a mixture, and the concentration of the chemical is less than one percent (1%) by weight, the facility need not count the mixture in determining whether the facility possesses the STQ.

(3) Release-Explosive Chemicals. For each release-explosive chemical of interest, a facility shall count the total quantity of all commercial grades of the chemical of interest toward the STQ, unless a specific minimum concentration is assigned in the Minimum Concentration column of Appendix A to part 27, in which case the facility should count the total quantity of all commercial grades of the chemical at the specified minimum concentration.



Acronym List

ACG	A Commercial Grade
APA	A Placarded Amount
CFATS	Chemical Facility Anti-Terrorism Standards
CFR	Code of Federal Regulations
COI	Chemical(s) of Interest
CSAT	Chemical Security Assessment Tool
CUM 100g	Cumulative Screening Threshold Quantity of 100 grams for designated Chemical Weapons
CVI	Chemical-terrorism Vulnerability Information
CW/CWP	Chemical Weapons/Chemical Weapons Precursor
CWC	Chemical Weapons Convention
DHS	U.S. Department of Homeland Security
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
EXP/IEDP	Explosive/Improvised Explosive Device Precursor
IFR	Interim Final Rule
MTSA	Maritime Transportation Security Act
MWAP	Maximum allowable working Pressure
NFPA	National Fire Protection Association
NRC	Nuclear Regulatory Commission
RMP	Risk Management Plan
STQ	Screening Threshold Quantity
WME	Weapon of Mass Effect