

## Gas Insulated Equipment (GIE) Reporting Form Supplemental Instructions for Data Years 2022-2024

Updated March 1, 2023

The Regulation for Reducing Greenhouse Gas Emissions from Gas Insulated Equipment (Regulation) requires all regulated entities to submit an annual report to the California Air Resources Board (CARB), by June 1 (or first business day thereafter) of each year, for activities and emissions that occurred during the previous calendar year. CARB has developed a standardized GIE Reporting Form for submission for data years 2022-2024. This document provides instructions on how to complete the reporting form, including references to the sections of the Regulation containing the regulatory requirement language. These instructions are supplemental to those contained in the reporting form itself. Please carefully read the reporting form's "Instructions" Worksheet in addition to the information below.

## Worksheet: Facility Info

This worksheet enables data input throughout the reporting form and must be completed prior to entering data in the other worksheets. This worksheet captures basic information about the Covered Insulating Gases being used by the reporting entity, plus other contact information for the entity and the Designated Representative submitting the report. Enter data for all applicable fields. If a field does not apply, leave it blank.

## Data Year

Select the data year for which the report is submitted. See section 95351(a) for the regulatory definition of Data Year. This version (R.05) of the form is designed for reporting for data years 2022 through 2024 only.

#### **Covered Insulating Gas**

Enter the Covered Insulating Gas(es) present in GIE, Gas Containers, and/or Gas Carts during the data year, either by selecting the gas from the drop-down menu or entering the name of the Covered Insulating Gas. See section 95351(a) for the regulatory definition of Covered Insulating Gas. Leave any unused rows in the table blank.

## Covered Insulating Gas' GWP

If the Covered Insulating Gas is selected from the drop-down menu in the previous column, the global warming potential (GWP) will auto-populate. If a gas is entered by a user, enter the 100-year time horizon GWP of that covered insulating gas here. See section 95351(a) for the regulatory definition of Global Warming Potential.

## Mass Share(s) of Covered Insulating Gas in Gas Blend(s) (expressed as decimal)

If the covered insulating gas is a blend of multiple gases, enter the mass share of the Covered Insulating Gas (the ratio of the mass of Covered Insulating Gas relative to the total amount of insulating gas, expressed as a decimal value). For example, enter "0.05" if the blend contains 5% perfluoroisobutyronitrile and 95% other gases such as oxygen and carbon dioxide. If there are multiple blends of the same Covered Insulating Gas, separate the individual mass share entries by a comma. If the Covered Insulating Gas is not used in a blend (e.g., SF<sub>6</sub>), leave this field blank.

## GIE Owner's Name

Enter the legal name of the entity (e.g., company, corporation, or agency) that is required to report under this Regulation, referred to as "GIE Owner" in the regulatory text. See section 95351(a) for the regulatory definition of GIE Owner.

## ARB ID (if assigned)

Enter the unique ID number that CARB assigned to the entity for reporting under this Regulation. This field is only applicable to Cal e-GGRT reporters.

## Telephone Number

Enter ten-digit phone number of the GIE Owner.

## Addresses of GIE Owner's Headquarters (Physical, Mailing, and Document/Record Location)

Cal e-GGRT reporters do <u>not</u> need to provide the physical and mailing addresses in their report because they provide them during registration. Non-Cal e-GGRT reporters must provide the street, city, state, and ZIP code of their physical and mailing addresses. For all reporters, document and record location information is only required if the location is different from the entity's physical address.

#### Designated Representative's (DR) Name and Contact Information

For Cal e-GGRT reporters, enter the name and official title of the Designated Representative (DR), as defined in section 95351(a). Cal e-GGRT reporters do <u>not</u> need to provide the DR contact information in their report because they provide them during registration. For non-Cal e-GGRT reporters, enter the name and official title of the DR, as defined in section 95351(a), and the DR's email address, the ten-digit phone number, and mailing address (street, city, state, and ZIP code).

#### Combine/split of GIE owner(s) since prior year's report submission?

Select either "Yes" or "No" from the drop-down menu to indicate whether the reporting entity has combined into or split from other entities since the prior year's report submission. See sections 95353(i) and 95353(j) for regulatory provisions on combining and splitting of GIE Owners.

## Worksheet: Hermetically Sealed GIE

This worksheet captures a current and complete inventory of the reporting entity's Hermetically Sealed GIE owned at some point during the data year. Leave this worksheet blank if there are none to report.

#### Serial Number

Enter the serial number of the GIE device, which is usually found on the nameplate affixed to the device. If the serial number is unknown or is a duplicate to another device, use a unique identifier and retain documentation that allows the GIE device to be readily identifiable, per section 95354(a)(3).

## Equipment Type

Select the equipment type (e.g., circuit switcher, switch) from the drop-down menu. If the equipment type of a device is not on the list, select "Other."

## Equipment Type (if Other)

This is only required if "Other" is selected in the previous column; if so, enter the equipment type of the GIE device.

## Seal Type

The seal type "Hermetic" will auto-populate when other information about the GIE device is entered. See section 95351(a) to ensure equipment reported in this worksheet meet the regulatory definition of Hermetically Sealed GIE.

#### Manufacturer

Enter the name of the manufacturer of the GIE device.

#### Year Manufactured

Enter the year the GIE device was manufactured in yyyy format. If the manufacturing year cannot be determined, report a best estimate of the year of manufacture per section 95354(a)(2)(A). Note that this subsection also requires that the entity record how the estimated year was determined.

## Voltage Capacity (kilovolts, kV)

Enter the Voltage Capacity (often referred to as the rated voltage) of the GIE device in kilovolts (kV). See section 95351(a) for the regulatory definition of Voltage Capacity.

## Nameplate Capacity (lb)

Enter the Nameplate Capacity in pounds. See section 95351(a) for the regulatory definition of Nameplate Capacity.

## Covered Insulating Gas

Select from the drop-down menu the Covered Insulating Gas used in the GIE device. The options in this drop-down menu are based on those selected/entered in the Covered Insulating Gas section in the Facility Info worksheet.

## Covered Insulating Gas' GWP

The GWP of the Covered Insulating Gas will auto-populate once a Covered Insulating Gas is selected in the previous column.

#### Jointly Owned?

Select "Yes" or "No" from the drop-down menu to indicate whether the device is jointly owned with another GIE Owner.

## GIE Owner's Equity Share (%)

This field is required only for jointly owned GIE devices. Enter your entity's equity share of the device as a percentage.

## Name, ARB ID and Equity Shares (%) of Other Co-Owners

This field is required only for jointly owned GIE devices. Enter the name(s), ARB ID(s) (if known), and equity share(s) of all other co-owners of the device. For example, enter "Alpha Corp., 511111, 30%. Beta Corp., Unknown ARB ID, 25%."

#### Acquired after 12/31/21?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was Acquired after December 31, 2021. See section 95351(a) for the regulatory definition of Acquire. If "Yes" is selected, provide additional information about the device in the next four columns.

## Date Acquired (mm/dd/yyyy)

This is only required for GIE devices Acquired after December 31, 2021. Enter the date the GIE device was Acquired in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Acquire.

#### Date Purchased (mm/dd/yyyy)

This is only required for GIE devices Acquired after December 31, 2021. Enter the date the GIE device was Purchased in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Purchase.

#### Short-Circuit Current Rating (kiloamperes, kA)

This is only required for GIE devices Acquired after December 31, 2021. Enter the shortcircuit current rating (often referred to as the interrupting current rating) of the GIE device in kiloamperes (kA).

#### Used Above or Below Ground?

This is only required for GIE devices Acquired after December 31, 2021. Select "Above Ground" or "Below Ground" from the drop-down menu to indicate whether the device is used above or below ground.

#### Connected to Electrical Power System on 1/1?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was connected to the electrical power system on January 1 of the data year. See section 95351(a) for the regulatory definition of Electrical Power System.

Last Updated 03/01/2023

### Connected to Electrical Power System on 12/31?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was connected to the electrical power system on December 31 of the data year. See section 95351(a) for the regulatory definition of Electrical Power System.

## Still Owned on 12/31?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was still owned on December 31 of the data year.

## Worksheet: Non-Hermetically Sealed GIE

This worksheet captures a current and complete inventory of the reporting entity's Non-Hermetically sealed GIE owned at some point during the data year. Leave this worksheet blank if there are none to report.

#### Serial Number

Enter the serial number of the GIE device, which is usually found on the nameplate affixed to the device. If the serial number is unknown or is a duplicate to another device, use a unique identifier and retain documentations that allows the GIE device to be readily identifiable, per section 95354(a)(3).

## **Equipment Type**

Select the equipment type (e.g., busbar, circuit breaker, switch) from the drop-down menu. If the equipment type of a device is not on the list, select "Other."

#### Equipment Type (if Other)

This is only required if "Other" is selected in the previous column. Enter the equipment type of the GIE device.

## Seal Type

The seal type "Non-Hermetic" will auto-populate when other information about the GIE device is entered. See section 95351(a) to ensure equipment reported in this worksheet meet the regulatory definition of Non-Hermetically Sealed GIE.

#### Manufacturer

Enter the name of the manufacturer of the GIE device.

#### Year Manufactured

Enter the year the GIE device was manufactured in yyyy format. If the manufacturing year cannot be determined, report a best estimate of the year of manufacture per section 95354(a)(2)(A). Note that this subsection also requires CARB that the entity record how the estimated year was determined.

## Voltage Capacity (kilovolts, kV)

Enter the Voltage Capacity (often referred to as the rated voltage) of the GIE device in kilovolts (kV). See section 95351(a) for the regulatory definition of Voltage Capacity.

## Nameplate Capacity (lb)

Enter the Nameplate Capacity in pounds. See section 95351(a) for the regulatory definition of Nameplate Capacity. This value is required to be reported for all GIE, including those Acquired after December 31, 2021 for which Covered Insulating Gas at Activation is required to be reported.

#### Covered Insulating Gas

Select from the drop-down menu the Covered Insulating Gas used in the GIE device. The options in this drop-down menu are based on those selected/entered in the Covered Insulating Gas section in the Facility Info worksheet.

#### Covered Insulating Gas' GWP

The GWP of the Covered Insulating Gas will auto-populate once a Covered Insulating Gas is selected in the previous column.

#### Jointly Owned?

Select "Yes" or "No" from the drop-down menu to indicate whether the device is jointly owned with another GIE Owner.

## GIE Owner's Equity Share (%)

This field is required only for jointly owned GIE devices. Enter your entity's equity share of the device as a percentage.

## Name, ARB ID and Equity Shares (%) of Other Co-Owners

This field is required only for jointly owned GIE devices. Enter the name(s), ARB ID(s) (if known), and equity share(s) of all other co-owners of the device. For example, enter "Alpha Corp., 511111, 30%. Beta Corp., Unknown ARB ID, 25%."

#### Acquired after 12/31/21?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was Acquired after December 31, 2021. See section 95351(a) for the regulatory definition of Acquire. If "Yes" is selected, provide additional information about the device in the next seven columns.

#### Date Acquired (mm/dd/yyyy)

This is only required for GIE devices Acquired after December 31, 2021. Enter the date the GIE device was Acquired in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Acquire.

#### Date Purchased (mm/dd/yyyy)

This is only required for GIE devices Acquired after December 31, 2021. Enter the date the GIE device was Purchased in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Purchase.

### Short-Circuit Current Rating (kiloamperes, kA)

This is only required for GIE devices Acquired after December 31, 2021. Enter the shortcircuit current rating (often referred to as the interrupting current rating) of the GIE device in kiloamperes (kA).

## Used Above or Below Ground?

This is only required for GIE devices Acquired after December 31, 2021. Select "Above Ground" or "Below Ground" from the drop-down menu to indicate whether the device is used above or below ground.

## Amount of Covered Insulating Gas in Device when Acquired (lb)

This is only required for GIE devices Acquired after December 31, 2021. Enter the amount of Covered Insulating Gas, in pounds, inside the GIE device when it was Acquired. See section 95354(a)(10)(A)2. for methods to determine the amount of gas. If the device contained no covered insulating gas when Acquired, enter "0."

#### Additional Covered Insulating Gas Added to Device for Activation (lb, if applicable)

This is only required for GIE devices Acquired after December 31, 2021. Enter the amount of <u>additional</u> Covered Insulating Gas, in pounds, added to the GIE device to make it Active GIE. See section 95351(a) for the regulatory definition of Active GIE and section 95354(a)(10)(A)3.b. for methods to determine the amount of gas added. If no additional gas was added (e.g., the GIE device was fully charged when Acquired), enter "0." If the GIE device has not yet been activated, leave this blank.

## Date Covered Insulating Gas First Added for Activation (mm/dd/yyyy, if applicable)

This is only required for GIE devices Acquired after December 31, 2021. Enter the date Covered Insulating Gas was first added to the GIE device to make it Active GIE. See section 95351(a) for the regulatory definition of Active GIE. Per section 95354(b), Covered Insulating Gas shall not be added to a GIE device prior to the data year in which the device becomes Active GIE either for the first time or after being previously accounted for as "removed from regular use" per section 95354(c)(1). If the GIE device has not yet been activated, leave this blank.

## Covered Insulating Gas at Activation (lb)

The amount of Covered Insulating Gas at Activation will be auto-calculated when other relevant information is provided. See section 95351(a) for the regulatory definition of Covered Insulating Gas at Activation. Per section 95354(a)(10)(A)6., this value is calculated based on the amount of gas inside the device when Acquired and the additional amount of gas added for activation, for GIE devices Acquired and made active after December 31, 2021. Otherwise, this value equals the Nameplate Capacity of the GIE device.

#### Active on 1/1?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was active on January 1 of the data year. See section 95351(a) for the regulatory definition of Active GIE.

#### Active on 12/31?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was active on December 31 of the data year. See section 95351(a) for the regulatory definition of Active GIE.

## Still Owned on 12/31?

Select "Yes" or "No" from the drop-down menu to indicate whether the device was still owned on December 31 of the data year.

## If not active on 12/31, Last Date Active (mm/dd/yyyy)

This is only required for GIE that had been Active GIE at some point during its ownership by the GIE Owner but was not active on December 31 of the data year. Enter the date the device was last active in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Active GIE.

## Number of Days Active in Data Year (enter "0" if none)

Enter the number of days the GIE device was active in the data year. See section 95351(a) for the regulatory definition of Active GIE. Enter "0" if the device was not active during the data year.

## Operational Status Change during Data Year (if applicable)

Select from the drop-down menu to indicate any operational status change to the GIE device during the data year. The options include single actions or combinations of actions so be sure to read drop-down menu options fully before choosing. See sections 95351(a), 95354(c)(1), and 95354(c)(2) for the regulatory definitions of Active GIE, "removed from regular use" and "transferred while in use," respectively. If none of the status changes apply to the GIE device reported, leave this blank.

## Amount of Gas Transferred Out of Device Removed from Regular Use (lb)

This is only required for GIE "removed from regular use" per the previous column. Enter the amount of covered insulating gas, in pounds, transferred out of the GIE device. See section 95354(c)(1) for the regulatory definition of "removed from regular use" and section 95354(d) for methods on transferring gas out a device.

## Worksheet: Early Action Credit

Per section 95353(d), regulated entities may accrue early action credit starting in 2021 for each Circuit Breaker that meets the following conditions: became Active GIE for the first time between January 1, 2021 and the phase-out date for equivalent sulfur hexafluoride (SF<sub>6</sub>) GIE device, has a Voltage Capacity of 72.5 kV or greater, is not insulated with SF<sub>6</sub> or oil, and has not been removed from regular use or transferred while in use.

Enter data for all GIE for which early action credit is being claimed, including GIE activated in the current data year and those already reported in a prior data year. If a device uses a non-SF<sub>6</sub> Covered Insulating Gas and is being claimed for early action

credit, it must be listed on both this sheet and also in the Non-Hermetically Sealed GIE worksheet. Leave this worksheet blank if not claiming early action credit.

#### Serial Number

Enter the serial number of the Circuit Breaker, which is usually found on the nameplate affixed to the device. If the serial number is unknown or is a duplicate to another device, use a unique identifier and retain documentations that allows the GIE device to be readily identifiable, per section 95354(a)(3).

#### Equipment Type

The only type of equipment eligible for early action credit is a Circuit Breaker, hence this column is pre-filled. See section 95351(a) to ensure equipment reported in this worksheet meet the regulatory definition of Circuit Breaker.

## Manufacturer

Enter the name of the manufacturer of the Circuit Breaker.

## Date Activated for the First Time (mm/dd/yyyy)

Enter the date that the Circuit Breaker became Active GIE for the first time in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Active GIE.

## Voltage Capacity (kilovolts)

Enter the Voltage Capacity (often referred to as the rated voltage) of the Circuit Breaker in kilovolts (kV). See section 95351(a) for the regulatory definition of Voltage Capacity.

## Medium that Provides Insulating and/or Interrupting Functions

Enter the medium that provides insulating and/or interrupting (arc quenching) functions (e.g., vacuum/dry air).

## Covered Insulating Gas (if applicable)

If the Circuit Breaker uses a Covered Insulating Gas for interrupting and/or insulating functions, enter the name of gas used.

## Covered Insulating Gas GWP (if applicable)

If the Circuit Breaker uses a Covered Insulating Gas for interrupting and/or insulating functions, enter the global warming potential (GWP) of the gas.

## Jointly Owned?

Select "Yes" or "No" from the drop-down menu to indicate whether the Circuit Breakers is jointly owned with another GIE Owner.

## GIE Owner's Equity Share (%)

This field is required only for jointly owned Circuit Breakers. Enter your entity's equity share of the Circuit Breaker as a percentage.

## Name, ARB ID and Equity Shares (%) of Other Co-Owners

This field is required only for jointly owned Circuit Breakers. Enter the name(s), ARB ID(s) (if known), and equity share(s) of all other co-owners of the circuit breaker. For example, enter "Alpha Corp., 511111, 30%. Beta Corp., Unknown ARB ID, 25%."

#### Acquired after 12/31/21?

Select "Yes" or "No" from the drop-down menu to indicate whether the Circuit Breaker was Acquired after December 31, 2021. See section 95351(a) for the regulatory definition of Acquire. If "Yes" is selected, provide additional information about the device in the next four columns.

## Date Acquired (mm/dd/yyyy)

This is only required for Circuit Breakers Acquired after December 31, 2021. Enter the date the device was Acquired in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Acquire.

## Date Purchased (mm/dd/yyyy)

This is only required for Circuit Breakers Acquired after December 31, 2021. Enter the date the device was Purchased in mm/dd/yyyy format. See section 95351(a) for the regulatory definition of Purchase.

## Short-Circuit Current Rating (kiloamperes, kA)

This is only required for Circuit Breakers Acquired after December 31, 2021. Enter the short-circuit current rating (often referred to as the interrupting current rating) of the device in kiloamperes (kA).

## Used Above or Below Ground?

This is only required for Circuit Breakers Acquired after December 31, 2021. Select "Above Ground" or "Below Ground" from the drop-down menu to indicate whether the device is used above or below ground.

## Was Device Removed from Regular Use/Transferred While in Use During Data Year?

Select "Yes" from the drop-down menu if the Circuit Breaker was either "removed from regular use" or "transferred while in use" to another entity during the data year. Otherwise, select "No." See sections 95354(c)(1) and 95354(c)(2) for the regulatory definitions of "removed from regular use" and "transferred while in use," respectively.

## Worksheet: Gas Containers and Carts

This worksheet captures a current and complete inventory of Covered Gas Containers and Gas Carts that contain Covered Insulating Gas. Enter data for all Covered Gas Containers and Gas Carts owned by, stored on the property of, and/or used by the GIE Owner at some point during the data year. Requirements for weighing containers/carts are different for those that are owned by or stored on the property of the GIE Owner versus those that are not. Please see section 95354(g)(1) and 95354(j)(2)-(3) on requirements for containers/carts owned by or stored on the property of the GIE Owner, and see sections 95354(g)(2) and 95354(j)(4) on requirements for those that are neither owned by nor stored on the property of the GIE Owner. Leave this worksheet blank if there are none to report.

## Vessel Type

Select "Gas Container" or "Gas Cart" from the drop-down menu to indicate the type of vessel storing the Covered Insulating Gas. See section 95351(a) for the regulatory definitions of Gas Container and Gas Cart.

## Owned by or Stored on the Property of GIE Owner?

Select "Yes" or "No" from the drop-down menu to indicate whether the Covered Gas Container or Gas Cart is owned by or stored on the property of the GIE Owner. Note that the answer here will affect the drop-down menu options provided in the column Reason for Measuring Amount of Gas Inside Gas Container or Gas Cart.

## Gas Container or Gas Cart ID

Enter a unique identification number for each Covered Gas Container and Gas Cart that contains covered insulating gas.

## **Covered Insulating Gas**

Select from the drop-down menu the Covered Insulating Gas stored in the container/cart. The options in this drop-down menu are based on those selected/entered in the Covered Insulating Gas section in the Facility Info worksheet.

## Covered Insulating Gas' GWP

The GWP of the Covered Insulating Gas will auto-populate once a Covered Insulating Gas is selected in the previous column.

## Date Gas Container Weighed (mm/dd/yyyy)

Enter the date that the Covered Gas Container was weighed in mm/dd/yyyy format.

## Reason for Measuring Amount of Gas Inside Gas Container or Gas Cart

Select from the drop-down menu the reason for measuring the amount of Covered Insulating Gas inside the container/cart. The drop-down menu will populate according to the answer provided in the "Owned by or Stored on the Property of GIE Owner?" column. For a container/cart owned by or stored on the property of the GIE Owner, see sections 95354(g)(1) and 95354(j)(2-3) for regulatory requirements on when and how to perform these measurements. For a container/cart neither owned by nor stored on the property of the GIE Owner, see sections 95354(g)(2) and 95354(g)(2) and 95354(g)(4) for regulatory requirements on when and how to perform these measurements.

# Amount of Covered Insulating Gas in Gas Container or Gas Cart When Measured (lb)

Enter the weight, in pounds, of Covered Insulating Gas in each container/cart when the required measurement was taken. The reported gas weight in the container/cart should exclude the tare weight of the container or cart (see sections 95354(g)(3) and 95354(j)(2)(B), respectively).

## Covered Insulating Gas in Gas Container or Gas Cart at the Beginning of the Data Year (lb, if applicable)

This field is only required for Covered Gas Containers and Gas Carts owned by or stored on the property of the GIE Owner at the beginning of the data year. Enter the weight, in pounds, of Covered Insulating Gas in each container/cart at the beginning of the data year. This value should also match the end of calendar year weight for the same container/cart reported in the previous year's annual report.

## Worksheet: Emergency Events

This worksheet captures any CARB-approved exemptions for Emergency Events that occurred during the data year. See section 95351(a) and section 95357.1 for definitions and regulatory requirements related to Emergency Events and Emergency Event exemption requests. Leave this worksheet blank if there are none to report.

## **Event Number**

This column is pre-filled to allow for the entry of multiple Emergency Events, if applicable. List the information for each CARB-approved Emergency Event exemption separately.

## Covered Insulating Gas

Select from the drop-down menu the Covered Insulating Gas associated with the Emergency Event exemption. The options in this drop-down menu are based on those selected/entered in the Covered Insulating Gas section in the Facility Info worksheet.

#### Covered Insulating Gas' GWP

The GWP of the Covered Insulating Gas will auto-populate once a Covered Insulating Gas is selected in the previous column.

## Emissions (lb)

Enter the amount, in pounds, of Covered Insulating Gas associated with the Emergency Event exemption approved by CARB.

## Worksheet: Emissions, Emissions Limit

**Data input in this worksheet will be enabled once a Covered Insulating Gas is selected/entered in the Facility Info worksheet.** This worksheet captures data related to the reporting entity's emissions limit and emissions for the data year. Per section 95353(a), a GIE Owner's annual CO<sub>2</sub>e Emissions Excluding Emergency Events (row 36) shall not exceed their annual Emissions Limit (row 10). Enter a value in all required cells (light green cells on this worksheet) for each Covered Insulating Gas reported, even if the value is zero.

#### **Insulating Gas**

The Covered Insulating Gas(es) will populate, starting in column B, based on those selected/entered in the Covered Insulating Gas section in the Facility Info worksheet.

## Average System Capacity (lb)

Calculate and report the Average System Capacity, in pounds, using the equation found in section 95353(b). Report this value separately for each covered insulating gas used, if applicable. As a reminder, the Average System Capacity is <u>not</u> the mean capacity of all GIE devices. The equation in section 95353(b) considers the Covered Insulating Gas at Activation for each GIE device that was Active GIE at some point during the data year, prorated by the number of days active during the data year, then sums these values. See section 95351(a) for the regulatory definition of Active GIE, and note that Hermetically Sealed GIE are not Active GIE.

## Average CO<sub>2</sub>e Capacity (MTCO<sub>2</sub>e)

The Average CO<sub>2</sub>e Capacity, in metric tons of carbon dioxide equivalent, will autocalculate when the Average System Capacity (row 5) is provided, using the equation found in section 95353(c).

## Early Action Credit (EAC<sub>i</sub>, MTCO<sub>2</sub>e)

This is applicable to GIE Owners who elect to claim early action credit. Calculate and report early action credit (EAC<sub>i</sub>) being claimed, in metric tons of carbon dioxide equivalent, using the equation in section 95353(d). If no credit is being claimed, enter "0."

## Data Year 2021 Average CO<sub>2</sub>e Capacity (MTCO<sub>2</sub>e):

This field is required only for entities who elect to claim early action credit. Enter the Average CO<sub>2</sub>e Capacity submitted in the entity's data year 2021 annual report, in metric tons of carbon dioxide equivalent. Per section 95353(f), the total amount of early action credit cannot exceed 10 percent of the GIE Owner's data year 2021 average CO<sub>2</sub>e capacity. This value is used to determine the actual amount of early action credit the GIE Owner can claim.

## EAC<sub>≤10</sub> (MTCO<sub>2</sub>e)

The EAC<sub> $\leq10$ </sub>, in metric tons of carbon dioxide equivalent, will be auto-calculated based on information reported in the previous two rows (rows 8 and 9). This field calculates the amount of early action credit the entity is allowed to apply towards their emissions limit per section 95353(f).

## Emissions Limit (MTCO<sub>2</sub>e)

The Emissions Limit, in metric tons of carbon dioxide equivalent, will be auto-calculated based on the entity's Average CO<sub>2</sub>e Capacity (row 5), EAC<sub>≤10</sub> (row 9), and Annual Emission Factor (tables 4 and 5 of Regulation), using the equation found in section 95353(g) and provision in 95353(h). The Emissions Limit is compared to the entity's annual CO<sub>2</sub>e Emissions Excluding Emergency Events (row 36) to determine compliance pursuant to section 95353(a).

#### **Insulating Gas**

The Covered Insulating Gas(es) will populate, starting in column B, based on those selected/entered in the Covered Insulating Gas section in the Facility Info worksheet.

#### Decrease in inventory

Entries to rows 14 to 34 calculate a GIE Owner's annual emissions, for each covered insulating gas, pursuant to the equation in section 95354.1(a).

Decrease in inventory will be auto-calculated based on information reported for the next two rows (rows 15-16). It is the amount of Covered Insulating Gas stored in gas containers and gas carts (but not in GIE) at the beginning of the data year minus that at the end of the data year.

#### Covered insulating gas stored in containers/carts at the beginning of the data year

If the entity owns or stores on its property any Covered Gas Containers or Gas Carts, enter the amount, in pounds, of Covered Insulating Gas stored in the containers/carts, but not in GIE, at the <u>beginning</u> of the data year. This value should also match the total end of calendar year weight of gas stored in containers/carts used in the previous year's annual report. If the entity does not own or store on its property any Covered Gas Containers or Gas Carts, enter "0."

#### Covered insulating gas stored in containers/carts at the end of the data year

If the entity owns or stores on its property any Covered Gas Containers or Gas Carts, enter the amount, in pounds, of Covered Insulating Gas stored in the containers/carts, but not in GIE, at the <u>end</u> of the data year. If the entity does not own or store on its property any Covered Gas Containers or Gas Carts during the data year, enter "0."

#### Acquisitions

Acquisitions will be auto-calculated based on information reported for the next four rows (rows 18-21). It is the sum of the amount of Covered Insulating Gas(es) obtained by the GIE Owner through multiple venues (described in the next four rows) during the data year.

## Covered insulating gas obtained in bulk from chemical producers, distributors, or other entities

Enter the amount, in pounds, of Covered Insulating Gas obtained in bulk (e.g., in Gas Containers or Gas Carts) during the data year from chemical producers, distributors, or other entities. If none were obtained, enter "0."

## Covered insulating gas inside GIE when acquired, for any GIE that became active for the first time during the data year

Enter the amount, in pounds, of Covered Insulating Gas inside GIE when Acquired, for any GIE that became active for the first time during the data year. If no GIE became active for the first time during the data year, enter "0."

## Covered insulating gas at activation for active GIE transferred while in use from another entity

Enter the amount, in pounds, of Covered Insulating Gas at Activation for Active GIE "transferred while in use" during the data year <u>from</u> another entity pursuant to section 95354(c)(2). See section 95351(a) for the regulatory definitions of Active GIE and

Covered Insulating Gas at Activation. If no Active GIE were transferred while in use from another entity during the data year, enter "0."

#### Covered insulating gas returned to site after off-site recycling

Enter the amount, in pounds, of Covered Insulating Gas returned to GIE Owner's site (e.g., in Gas Containers or Gas Carts) during the data year after off-site recycling. If none were returned, enter "0."

#### Disbursements

*Disbursements* will be auto-calculated based on information reported for the next five rows (rows 23-27). It is the sum of the amount of Covered Insulating Gas(es) disbursed by the GIE Owner through multiple venues (described in the next five rows) during the data year.

## Covered insulating gas at activation for active GIE transferred while in use to another entity

Enter the amount, in pounds, of Covered Insulating Gas at Activation for Active GIE "transferred while in use" during the data year <u>to</u> another entity pursuant to section 95354(c)(2). If no Active GIE were transferred while in use to another entity during the data year, enter "0."

#### Covered insulating gas returned to suppliers

Enter the amount, in pounds, of Covered Insulating Gas returned to suppliers (e.g., in Gas Containers or Gas Carts) during the data year. If none were returned, enter "0."

#### Covered insulating gas sent off site for recycling

Enter the amount, in pounds, of Covered Insulating Gas sent off site for recycling (e.g., in Gas Containers or Gas Carts) during the data year. If none were sent off, enter "0."

#### Covered insulating gas sent to destruction facilities

Enter the amount, in pounds, of Covered Insulating Gas sent to destruction facilities (e.g., in Gas Containers or Gas Carts) during the data year. If none were sent off, enter "0."

#### Covered insulating gas sent to other entities

Enter the amount, in pounds, of Covered Insulating Gas sent to other entities (e.g., in Gas Containers or Gas Carts) during the data year. If none were sent off, enter "0."

## Net increase in total capacity of active GIE owned and filled with covered insulating gas

Net increase in total capacity of active GIE owned and filled with covered insulating gas will be auto-calculated based on information reported for the next four rows (rows 29-32). This is the sum of Covered Insulating Gas at Activation for Active GIE added to the inventory ("added") minus the sum of Covered Insulating Gas at Activation for GIE removed from the inventory ("removed") during the data year. As detailed in the next four terms, the "added" portion includes GIE that became active for the first time,

became active after previously being considered as "removed from regular use," and "transferred while in use" from another entity; whereas the "removed" portion includes GIE that were "removed from regular use" and "transferred while in use" to another entity.

## Covered insulating gas at activation for GIE whose status changed to active for the first time or after being considered removed from regular use

Enter the amount, in pounds, of Covered Insulating Gas at Activation for GIE that, during the data year, became active for the first time or became active after previously being considered as "removed from regular use" pursuant to section 95354(c)(1). If no GIE satisfy either criterion, enter "0."

## Covered insulating gas at activation for GIE removed from regular use

Enter the amount, in pounds, of Covered Insulating Gas at Activation for GIE "removed from regular use" during the data year pursuant to section 95354(c)(1). If no GIE were removed from regular use, enter "0."

## Covered insulating gas at activation for active GIE transferred while in use to another entity

Enter the amount, in pounds, of Covered Insulating Gas at Activation for Active GIE "transferred while in use" during the data year <u>to</u> another entity pursuant to section 95354(c)(2). This value should equal to that entered for the same field (row 23) under the Disbursement category. If no Active GIE were transferred while in use to another entity during the data year, enter "0."

# Covered insulating gas at activation for active GIE transferred while in use from another entity

Enter the amount, in pounds, of Covered Insulating Gas at Activation for Active GIE "transferred while in use" during the data year <u>from</u> another entity pursuant to section 95354(c)(2). This value should equal to that entered for the same field (row 20) under the Acquisition category. If no Active GIE were transferred while in use from another entity during the data year, enter "0."

## Annual Emissions (lb)

Calculate and report the amount, in pounds, of annual emissions using the equation found in section 95354.1(a) for each Covered Insulating Gas. If there were no emissions during the data year, enter "0."

## CO<sub>2</sub>e Emissions (MTCO<sub>2</sub>e)

 $CO_2e$  Emissions, in metric tons of carbon dioxide equivalent, will be auto-calculated when the Annual Emissions for each Covered Insulating Gas (row 34) is provided, using the equation found in section 95354.1(b).

## CO<sub>2</sub>e Emissions Excluding Emergency Events (MTCO<sub>2</sub>e)

CO<sub>2</sub>e Emissions Excluding Emergency Events, in metric tons of carbon dioxide equivalent, will be auto-calculated using the equation found in section 95354.1(c). This

value is the CO<sub>2</sub>e Emissions (row 35) minus the sum of emissions from the CARBapproved Emergency Event exemptions entered in the Emergency Events worksheet (after unit conversion). The entity's annual CO<sub>2</sub>e Emissions Excluding Emergency Events is also compared to the Emissions Limit (row 10) to determine compliance per section 95353(a).

## Worksheet: Nameplate Cap Adjustment

This worksheet applies to GIE Owners who elect to perform a Nameplate Capacity adjustment. This worksheet lists the GIE Owner's GIE devices that underwent a Nameplate Capacity adjustment during the data year. Review the provisions in section 95357.2 for detailed requirements, including the submission of a notification to CARB prior to performing adjustments. Per section 95357.2(e), starting in the data year when the adjustment process is performed, the adjusted Nameplate Capacity value must be used in all provisions where Nameplate Capacity is required to be recorded, reported, or used in calculations under the Regulation. Any GIE that underwent Nameplate Capacity adjustments should also be reported in the Non-Hermetically Sealed GIE worksheet of this reporting form using the updated Nameplate Capacity. Leave this worksheet blank if there are no Nameplate Capacity adjustments to report.

## Serial Number

Enter the serial number of the GIE device, which is usually found on the nameplate affixed to the device. If the serial number is unknown or is a duplicate to another device, use a unique identifier and retain documentations that allows the GIE device to be readily identifiable, per section 95354(a)(3).

## Date Process Completed (mm/dd/yyyy)

Enter the date, during the data year, that the Nameplate Capacity adjustment process was performed for each applicable GIE device.

## Pressure Reading 5 min after Achieving Blank-Off Pressure

Enter the pressure reading of the GIE device at five minutes after achieving Blank-off Pressure during the adjustment process pursuant to section 95357.2(c)(5). See section 95351(a) for the regulatory definition of Blank-off Pressure.

## Blank-Off Pressure for the GIE Device

Enter the Blank-Off Pressure for the GIE device, which is usually found in product specification sheets or directly communicated and documented from the manufacturer. See section 95351(a) for the regulatory definition of Blank-off Pressure.

## Blank-Off Pressure of the Gas Cart

Enter the Blank-off Pressure of the gas cart used to perform the Nameplate Capacity adjustment process. The Blank-off Pressure of the gas cart may be found in product specification sheets or directly communicated and documented from the manufacturer. See section 95351(a) for the regulatory definition of Blank-off Pressure.

## Unit of Measure for Pressure Readings

Enter the unit of measure used for the pressure readings reported in the previous three columns. Use a consistent unit of measure across the three readings.

## Was Device Removed from Regular Use without a Nameplate Capacity Adjustment due to Compromised Integrity?

Select "Yes" from the drop-down menu if the GIE device qualified for a Nameplate Capacity adjustment but was "removed from regular use" without going through the Nameplate Capacity adjustment process due to compromised integrity, pursuant to section 95357.2(b)(3). Otherwise, select "No." See section 95354(c)(1) for the regulatory definition of "removed from regular use."