



SF₆ Reporting Form Supplemental Instructions

Updated 5/10/2019

The [Regulation for Reducing Sulfur Hexafluoride \(SF₆\) Emissions from Gas Insulated Switchgear \(GIS\) \(Regulation\)](#) 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 [SF₆ GIS Annual Reporting Form](#) for submission. This document provides some instructions on how to complete the form. These instructions are supplemental to those contained in the spreadsheet itself. **Please carefully read the “Instructions,” “Guidance,” and “Data Export XML” Worksheets in addition to the information below.**

Worksheet: Facility Overview Information

This worksheet captures basic information about the reporting entity and its annual emissions and emission rate.

Entity Name

Enter the legal name of the entity (e.g., company, corporation, or agency) that is required to report under this Regulation. The reporting entity is also referred to as “GIS owner” in the regulatory text.

Helpful Tip: Each limited liability company is considered an independent owner and is individually subject to this Regulation.

ARB ID

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.

Record Location

Enter the street name and number, city, state, and zip/postal code where records are kept for the entity. For Cal e-GGRT reporters, this field is optional if the record location is the same as the entity’s headquarters address.

Preparer’s Information

Enter the name, e-mail address, and the ten-digit phone number of the person who prepared this report.

Reporting Year

Enter the calendar year for which SF₆ emissions are being reported.

Annual SF₆ Emissions (in pounds):

Calculate and report the annual SF₆ emissions (in pounds) using the formula found in section 95356(d) of the Regulation.

Annual SF₆ Emission Rate (as a percentage)

Calculate the annual SF₆ emission rate (as a percentage) using the formula found in section 95356(e) of the Regulation.

Worksheet: GIS Equipment

This worksheet captures a current and complete inventory of the reporting entity's GIS equipment for the reporting year. Include all equipment regardless of the operating status or the duration of ownership in the reporting year.

GIS Serial Number

The serial number is usually found on the nameplate affixed to the piece of equipment.

Helpful Tip: If a device does not have a serial number, use any permanently affixed unique identifier in place of a serial number.

GIS Equipment Type

Enter the equipment type (e.g., busbar, circuit breaker, or switch).

GIS Seal Type

Select seal type (Hermetic or Non-hermetic) from the drop-down menu.

Helpful Tip: The Regulation defines "hermetically sealed" as gas-tight and sealed for life. Hermetically sealed equipment is pre-charged with SF₆, sealed at the factory, and is not refillable by its user.

GIS Manufacturer

Enter the name of the manufacturer of the GIS equipment.

GIS Date Manufactured (mm/dd/yyyy)

Enter the date each piece of GIS equipment was manufactured in mm/dd/yyyy format.

Helpful Tip: If only the year is known, enter January 1 and the year (e.g., 01/01/1985). If only the year and month are known, enter the date using the first day of that month and the year (e.g., 06/01/1989). If the manufacturing date cannot be determined, CARB would accept a best estimated date. CARB expects that the GIS owner to record how the estimated date was determined but not submit it with the annual report.

GIS Voltage Capacity (kilovolts, kV)

Record the voltage capacity in kilovolts (kV).

Helpful Tip: Make sure to use the correct unit of kilovolts (kV).

GIS SF₆ Capacity (lbs.)

Record the SF₆ capacity in pounds as stated on the nameplate or in the manufacturer's official product specification.

GIS Status

Select the operating status ("Active" or "Inactive") from the drop-down menu, per the definition of "Active GIS Equipment" in section 95351(a)(1) of the Regulation.

Helpful Tip: Select "Active" if the GIS equipment is active for any part of the reporting year.

Worksheet: SF₆ Transferred

This worksheet records all SF₆ gas transfers into and out of the GIS equipment listed in the "GIS Equipment" worksheet for the reporting year. Include gas transfers from containers owned by or stored on the property of the entity and from any third party gas distributors.

GIS Serial Number

Enter the serial number of the GIS equipment that SF₆ gas was added to or removed from during the reporting year.

Helpful Tip: The serial number should match one of those listed in the "GIS Equipment" worksheet.

Date SF₆ Transferred (mm/dd/yyyy)

Enter the date that SF₆ was added to or removed from the GIS equipment in mm/dd/yyyy format.

Amount Transferred (lbs.)

Enter the amount, in pounds, of SF₆ transferred into or out of the GIS equipment.

Helpful Tip: Use a positive number for gas added to a piece of equipment and use a negative number for gas removed from the equipment.

Worksheet: SF₆ Gas Containers

This worksheet captures a current and complete inventory of SF₆ gas containers owned by or stored on the property of the reporting entity for the reporting year.

Container ID

Enter the container ID number for each SF₆ gas container.

Container Size (SF₆ capacity in pounds)

Enter the amount, in pounds, that the gas container is designed to hold. If the container size cannot be determined, contact the manufacturer or distributor. The table below may also be used to look up the size of containers from common gas distributors.

Company	Designation	SF₆ Cylinder Size (lbs.)
Air Gas Great Lakes	200	115
Air Gas Great Lakes	150	80
Air Gas Great Lakes	80	35
Matheson Tri-Gas	1A	247
Matheson Tri-Gas	1R	139
Matheson Tri-Gas	QX	109
Matheson Tri-Gas	2	92
Matheson Tri-Gas	2R	81
Matheson Tri-Gas	GX	81
Matheson Tri-Gas	LD	61
Matheson Tri-Gas	3	49
Matheson Tri-Gas	3R	39
Matheson Tri-Gas	UX	39
Matheson Tri-Gas	4	27
Polar Technology	D	5
Polar Technology	40cf	18
Polar Technology	55cf	28
Polar Technology	80cf	38
Polar Technology	110cf	57.5
Polar Technology	125cf	57.5
Polar Technology	220cf	115
Polar Technology	250cf	115
Praxair	K	115
Praxair	AS	70

Street Address, City, State, and ZIP/Postal Code

Enter the street name and number, city, state, and zip/postal code where each SF₆ gas container was stored.

SF₆ Weight in Container (lbs.)

Enter the weight, in pounds, of SF₆ in each container at the end of the calendar year, and when each container was added to or removed from inventory.

Helpful Tip: The reported SF₆ weight in the container should exclude the tare weight of the container itself.

SF₆ gas containers owned by or stored on site the property of the reporting entity must be weighed annually at the end of the calendar year.

Helpful Tip: CARB considers December 1 through December 31 to be the “end of the calendar year”.

If a new container is added to the inventory at any time during the reporting year, record the weight upon its arrival. If the added container remains in the inventory through the end of the calendar year, it must be weighed again at the end of the calendar year and recorded as a separate entry.

If a container is removed from the inventory at any time during the reporting year, record the weight upon its departure.

Date Container Weighed (mm/dd/yyyy)

Record the date that the container was weighed in mm/dd/yyyy format.

Reason for Weighing Container

Select the reason the container was weighed (“End of Calendar Year Weighing,” “Added to Inventory,” or “Removed from Inventory”) from the drop-down menu.