UNITED STATES AIR FORCE (USAF)

QUICK GUIDE TO THE MANDATORY GREENHOUSE GAS REPORTING RULE (40 CFR 98)



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Introduction

A particular group of gases have been identified that trap heat in the earth's atmosphere. The gases act much like a greenhouse; allowing light to come in, but retaining heat. Due to this effect, these gases are referred to as "Greenhouse Gases (GHGs)". As a result of this retained heat, the earth's climate appears to be changing. Although changes in the earth's climate has been cyclical and ongoing throughout history, many scientists believe that greenhouse gas emissions created from human activities are accelerating the process. The changes in weather patterns can lead to serious consequences such as long droughts, an increase in extreme weather events, as well as an adverse impact on species that are not able to adapt to the changes in their environment.

The Mandatory Greenhouse Gas Reporting Rule [40 CFR 98; aka Mandatory Reporting Rule, (MRR)] is a significant component of the Environmental Protection Agency's (EPA) strategy to regulate emissions of greenhouse gases. The EPA was directed in 2007 to design a registry for tracking national Greenhouse Gas (GHG) emissions. Subsequently, the Mandatory Greenhouse Reporting Rule, published in 2009, created a national database for recording and tracking of GHG emissions. Previously, the EPA did not have a comprehensive method for tracking GHG emissions data connected to a specific facility or to an industrial category. The database is intended to gain information regarding the quantities of GHGs that are being emitted and where those emissions are taking place. The information derived from the data is evaluated to ensure achievement of GHG emission reductions and to develop environmental policies and programs at the federal, state, and local levels. Most small facilities are not affected by this rule.

This guidance addresses the MRR as it pertains to and impacts United States Air Force (USAF) installations. Specifically it addresses main points and questions on: definition of a facility, who must report, State GHG Reporting versus MRR, AF source to report, reporting, and an exit strategy.

Definition of Facility for Military Installations

The definition of a facility in the MRR contains a specific provision that allows military facilities (i.e., installations) to classify themselves as more than a single facility allowing for GHG emissions to be segmented and potentially avoiding the MMR requirements:

"Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties."

The MRR allows any military facility (installation) to set its boundaries based on common ownership or common control and independent functional groupings. For purposes of the rule, the definition of facility is "any physical property, plant, building, structure, source, or stationary equipment located on one or more contiguous or adjacent properties in actual physical contact or

separated solely by a public roadway or other public right-of-way and under common ownership or common control, which emits or may emit any GHG."

Each installation should take into consideration the entire definition of "facility" under the MMR, including the specific provision for military facilities. One approach would be to base an installation's determination by subdividing into multiple facilities in a manner consistent with the application of similar provisions for defining a facility or source that is provided in USEPA major source guidance for military installations (Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act, 2 August 1996). A facility is not required to have applied the major source guidance previously in order to use it for the GHG reporting requirements, but if the major source guidance has been used previously, its use for GHG reporting should be consistent with the previous application.

Several examples are provided below to demonstrate how the facility definition may be applied, but installations should refer to the major source guidance for more details and consult with local area USAF counsel.

<u>Common Control</u>: Pollutant-emitting activities that are under the control of different military services are not under common control.

<u>Functional Grouping</u>: USEPA has acknowledged that military installations are often combinations of functionally distinct groupings of pollutant-emitting activities that may be distinguished the same way that industrial and commercial sources are distinguished. For example, a complex facility may operate an airfield, a maintenance depot, a school for infantry training, and a research and development laboratory. Per USEPA's guidance, each of these activities may be a separate functional grouping.

Non-Military Activities: Military installations include numerous activities that are not directly related to the military mission and are not normally found at other types of industrial sources. These types of activities include residential housing, schools, day care centers, churches, recreational parks, theaters, shopping centers, grocery stores, gas stations, and dry cleaners. Because these amenities typically do not represent essential activities related to the primary military activity(ies) of the base, USEPA believes they may be appropriately considered not to be support facilities to the primary military activities. As such, these activities may be treated as separate sources for all purposes for which an industrial grouping distinction is allowed.

However, there are instances where similar types of activities do function as support facilities to the primary military activities at an installation, and in these instances, they should be grouped with the primary military activities that they support. For example, food services that support troops in barracks at basic training camps would be grouped with other emissions units associated with the basic training operations, but a fast food chain outlet would not.

<u>Support Activities</u>: Support activities at military bases (e.g., boilers and wastewater treatment facilities) would be aggregated with their associated functional grouping. Consequently, emissions from support facilities would be added to the emissions

from the primary activity when determining the GHG emissions from the "source." Emissions sources that support non-military activities would be associated with the non-military functional grouping that receives the majority of their products or services. For example, a boiler supporting an elementary school at the military installation would be grouped with the elementary school and not with other boilers that provide steam to a maintenance depot.

Where an activity supports more than one function, it usually would be aggregated with the primary activity to which it contributes 50 percent or more of its output. For example, a central steam plant may provide heat to most facilities on an installation. The GHG emissions from the plant would be aggregated with the primary activity of the base, which may be maintenance, airfield operations, troop training, ship operations, etc.

<u>Leased Activities</u>: Leased activities may be considered under separate control from activities under the control of the military-controlling entities at that installation. These leased activities would be considered "tenants" on military bases. They may include restaurants, banks, and schools, for example. In contrast, contract-for-service (or contractor-operated) activities at military installations usually would be considered under the control of the military entity that controls the contract. Leased activities are different from contract-for-service activities, as discussed in the major source guidance.

Who in the USAF must report?

Short Easy Answer:

Generally there are only three ways an AF facility usually triggers mandatory reporting, which includes owning/operating: very extensive electrical transition/distribution equipment, large municipal solid waste landfills, and/or a large number of stationary fuel combustion sources.

- In the extremely unlikely event that you have electrical transition/distribution equipment with a total nameplate capacity of SF₆ and PFC greater than 17,820 pounds, reporting is mandatory.
- In the highly unlikely event that you have municipal solid waste landfills that combined emit CH₄ in amounts equivalent to 25,000 metric tons CO₂e or more per year, reporting is mandatory.
- Reporting based on stationary fuel combustion is only required if the aggregate maximum rated heat input capacity of all stationary fuel combustion units at the facility is 30 mmBtu/hr or greater AND the facility emits 25,000 metric tons CO2e or more per year in combined emissions from all stationary fuel combustion sources. Inversely, reporting based on stationary fuel combustion sources can be void in three ways:
 - o If total facility annual GHG emissions for all stationary sources is less than 25,000 metric tons CO₂e, reporting is not required;
 - o If the annual emissions from all stationary fuel combustion sources is less than 25,000 metric tons CO₂e, reporting is not required; or

o If the aggregate *Maximum Rated Heat Input Capacity* (mmBtu/hr) of all stationary fuel combustion sources is less than 30 mmBtu/hr, reporting is not required.

Long Answer:

In general, the GHG MRR will apply only to USAF installations that meet the threshold requirements listed in 40 CFR 98, Subpart A. Applicability provisions for direct emitters of GHGs are summarized in three tables. These tables represent who must report as specified in 40 CFR 98.2(a)(1), (2), and (3). According to 40 CFR 98.2(a), the GHG reporting requirements and related monitoring, recordkeeping, and reporting requirements of the MRR apply to the facility owners/operators and suppliers. The following is an in-depth discussion on facilities applicable to the MRR requirement; however, Figure 1, Determining AF Facilities Subject to MMR, provides a simplified flow chart on determining if your AF facility is subject to the requirements under the MMR.

The owners/operators of any facility that is located in the United States or under or attached to the Outer Continental Shelf (as defined in 43 U.S.C. 1331) and that meets any of the following the requirements must meet the requirement of MRR:

Source Automatically Subject to Reporting: A facility that contains any source category that is listed in 40 CFR 98 Table A-3 (regardless of the quantity of CO2e they emit) in any calendar year starting in 2010 automatically subject to reporting. Most of the source category that is listed in Table A-3 relate strictly to production, and; therefore, do not apply to the AF. However, there are two source categories (municipal solid waste landfills and electrical transition/distribution equipment), while highly unlikely, may apply to AF facilities (See Table-1 below).

Municipal Solid Waste Landfills (MSWL, Subpart HH) means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. The category is more narrowly defined in 40 CFR 98.6. Only those MSWLs that accepted waste on or after 1 January 1980 and that generate methane (CH₄) in amounts equivalent to 25,000 metric tons CO_2e or more per year (whether or not that methane is captured and combusted) are subject to reporting under the rule. However, if there is more than one landfill at the facility, the calculated emissions from each landfill must be added together to determine whether the total emissions are over the 25,000 metric ton threshold for reporting.

The Electrical Transmission and Distribution equipment use source category (Subpart DD) consists of all electric transmission and distribution equipment and servicing inventory insulated with or containing sulfur hexafluoride (SF₆) or perfluorocarbons (PFCs) used within an electric power system. Electric transmission and distribution equipment and servicing inventory includes, but is not limited to: gas-insulated substations, circuit breakers, switchgear (including closed-pressure and hermetically sealed-pressure switchgear and gas-insulated lines containing SF₆ or PFCs), gas containers (such as pressurized cylinders), gas carts, electric power transformers, and

Table 1, Subpart A of Part 98 - Source Category List for §98.2(a)(1)

Source Category	Apllicable to USAF				
Source Categoriesa Applicable in 2010:					
Electricity generation units that report CO ₂ mass emissions year round through 40 CFR part 75 (subpart D).	NA, power sector only				
Adipic acid production (subpart E).	NA, production sector				
Aluminum production (subpart F).	NA, production sector				
Ammonia manufacturing (subpart G).	NA, production sector				
Cement production (subpart H).	NA, production sector				
HCFC-22 production (subpart O).	NA, production sector				
HFC-23 destruction processes that are not collocated with a HCFC-22 production facility and that destroy more than 2.14 metric tons of HFC-23 per year (subpart O).	NA, production sector				
Lime manufacturing (subpart S).	NA, production sector				
Nitric acid production (subpart V).	NA, production sector				
Petrochemical production (subpart X).	NA, production sector				
Petroleum refineries (subpart Y).	NA, production sector				
Phosphoric acid production (subpart Z).	NA, production sector				
Silicon carbide production (subpart BB).	NA, production sector				
Soda ash production (subpart CC).	NA, production sector				
Titanium dioxide production (subpart EE).	NA, production sector				
Municipal solid waste landfills that generate CH, in amounts equivalent to 25,000 metric tons CO,e or more per year, as determined according to subpart HH of this part.	Potentially (Not Likely), Only if $\mathrm{CH_4}$ in amounts equivalent to 25,000 metric tons $\mathrm{CO_2}\mathrm{e}$				
Manure management systems with combined CH, and N ₂ O emissions in amounts equivalent to 25,000 metric tons CO,e or more per year, as determined according to subpart JJ of this part.	NA				
Additional Source Categories Applicable in 2011 and Future Years:					
Electrical transmission and distribution equipment use at facilities where the total nameplate capacity of SF, and PFC containing equipment exceeds 17,820 pounds, as determined under §98.301 (subpart DD).	Potentially (Not Likely), Only if total nameplate capacity of SF6 and PFC containing equipment exceeds 17,820 pounds				
Underground coal mines liberating 36,500,000 actual cubic feet of CH, or more per year (subpart FF).	NA				
Geologic sequestration of carbon dioxide (subpart RR).	NA				
Electrical transmission and distribution equipment manufacture or refurbishment (subpart SS).	NA				
Injection of carbon dioxide (subpart UU).	NA				

other containers of SF_6 or PFC. You must report GHG emissions if the total nameplate capacity of SF_6 and PFC containing equipment (excluding hermetically sealed-pressure equipment) located within the facility, when added to the total nameplate capacity of SF_6 and PFC containing equipment (excluding hermetically sealed-pressure equipment) that is not located within the facility but is under common ownership or control, exceeds 17,820 pounds.

- Production and Manufacturing Sources: A facility that contains any production and manufacturing source category that is listed in 40 CFR 98, Subpart A, Table A-4 of this subpart and that emits 25,000 metric tons CO₂e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A-3 and Table A-4. The AF is not a commercial entity and is not in the production and manufacturing business; therefore, these source categories are not applicable to the AF.
- <u>Stationary Fuel Combustion Sources</u>: A facility that in any calendar year starting in 2010 meets all three of the conditions listed in 40 CFR 98.2(a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources ONLY. Additionally, the facility must meet the following requirements:
 - o The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is **30 mmBtu/hr or greater**.
 - o The facility emits **25,000 metric tons CO2e or more per year** in combined emissions from all stationary fuel combustion sources.

Note: The Stationary Fuel Combustion Source Category is the single most common trigger in mandating the MRR at USAF facilities.

Suppliers that are listed in 40 CFR 98 Table A-5 are also subject to the reporting requirements and related monitoring, recordkeeping, and reporting requirements of the MRR. The AF is not a commercial entity and is not in the supply business; therefore, **Table A-5 source categories** are not applicable to the USAF.

Of note, research and development activities are not considered part of ANY source category subject to the rule [40 CFR §98.2(a)(5)]. Research and development includes those activities conducted in process units or at laboratory bench-scale settings whose purpose is to conduct research and development for new processes, technologies, or products and whose purpose is not for the manufacture of products for commercial sale, except in a de minimis manner [40 CFR §98.6].

Does my base need to report? 40 CFR 98.2(a)(1): Table A-3 Municipal solid waste landfills with CH₄ ≥ 25K MT CO₂e? Sources Elec. transmission equipment with SF6 and PFC ≥ 17,820 lb? Table A-4 Sources 40 CFR 98.2(a)(2): Table A-4 applies to production and manufacturing source; therefore, these sources are NOT applicable to the Air Force Subject to 40 CFR 98; **GHG** reporting and related monitoring, and recordkeeping Note: Only include stationary IS REQUIRED 40 CFR 98.2(a)(3): Stationary Fuel fuel combustion sources for these checks. Combustion Sources Aggregate max rated heat input capacity ≥ 30 mmBtu.hr? All fuel combustion sources emit ≥ 25K MT CO₂e? 40 CFR 98.2(a)(4): Table A-5 Sources Table A-5 applies to Supplier source; therefore, these sources are NOT applicable to the Air Force IMPORTANT NOTE: In accordance

Figure 1, Determining AF Facilities Subject to MMR

Not subject to 40 CFR

98, GHG reporting is

NOT required

with the 40 CFR 98.6 definition of "Facility", operators of military installations may classify such installations as more than a single facility based on distinct and

independent functional groupings

within contiguous military properties.

How do I Calculate Maximum Rated Heat Input Capacity for Aircraft Engine Testing and Stationary Engines?

Aircraft engine testing and stationary engines are stationary fuel combustion source categories that are not rated in *Maximum Rated Heat Input Capacity* (mmBtu/hr); however, they must still be included as sources when evaluating the applicability of the MRR for your facility against the 30 mmBtu/hr or greater aggregate maximum rated heat input capacity threshold for the stationary fuel combustion units as specified in 40 CFR 98.2(a)(3). For these sources the *Maximum Rated Heat Input Capacity* (*C*) can easily be derived based on the fuel *Heating Value* (*HV*, see Table C-1 to 40 CFR 98 Subpart C for default HVs) and *Fuel Consumption Rate* (*q*). For stationary engines the equation is simply:

$$C\left(\frac{mmBtu}{hr}\right) = HV\left(\frac{mmBtu}{gal}\right) \times q\left(\frac{gal}{hr}\right)$$

For aircraft engine testing you have several throttle setting which results in various fuel consumption rates at various time intervals. Therefore, for aircraft engine testing you must modify the above equation with a time-weighted averaging the fuel consumption to calculate maximum rated heat input capacity:

$$C\left(\frac{mmBtu}{hr}\right) = HV\left(\frac{mmBtu}{gal}\right) \times \frac{\sum_{i=1}^{n} q_{i} \times t_{i}}{\sum_{i=1}^{n} t_{i}} \left(\frac{gal}{hr}\right)$$

Where:

 $q_i = \text{fuel consumption rate (gal/hr)}$ at throttle setting i

 t_i = time (hr) operated at throttle setting i

To simplify this process, the *Maximum Rated Heat Input Capacity (C)* for various AF aircraft engine testing is already calculated (see Table 2 below). The *C* values were estimated based on February 2014 Air Program Management System (APIMS) runtime data for all aircraft engines and fuel flow rate from AF 2014 Mobile Source Guide. Actual *C* values for a specific engine are the AF-wide average of all 2014 engine runs for the specified engine.

Table 2, Maximum Rated Heat Input Capacity (C) for Aircraft Engine Testing

Aircraft Engine	Max. Heat Input Capacity (mmBtu/hr)	Aircraft Engine	Max. Heat Input Capacity (mmBtu/hr)
F100-PW-100	106	J79-GE-17	82
F100-PW-200	69	J85-GE-5F	38
F100-PW-220	108	J85-GE-5H	49
F100-PW-229	77	J85-GE-5M	46
F101-GE-102	94	T56-A-7	25
F108-CF-100	60	T56-A-9	34
F110-GE-100	107	T56-A-14	13

Table 2, Maximum Rated Heat Input Capacity (C) for Aircraft Engine Testing
Continued

Aircraft Engine	Max. Heat Input Capacity (mmBtu/hr)	Aircraft Engine	Max. Heat Input Capacity (mmBtu/hr)
F110-GE-129	72	T56-A-15	29
F117-PW-100	46	TF33-P-9	87
F118-GE-100	41	TF33-P-102A	80
F119-PW-100	158	TF34-GE-100	15
F404-GE-400	94	TF34-GE-100A	22
J69-T-25	18	TF39-GE-1C	160

Does State GHG Reporting Override MRR?

No, the MRR is solely a federal mandate; any state-level GHG requirements are separate and additional requirements from the MRR. State-level GHG requirements do not override MRR, and MRR does not override any other state GHG requirements. If a facility is located in a state (such as California) with additional GHG reporting requirements and the facility is subject to that state's GHG reporting rules, a report to the state will still be required, even if the facility is not subject to the EPA's MRR. Facilities that are subject to both the state and federal reporting rules will be required to submit separate reports that comply with the specifics of each reporting program. This situation may require the collection of additional data and information, depending on the state's reporting requirements. Additionally, if the facility voluntarily reports to the Climate Action Registry, Climate Leaders, or a similar program, that would require yet another report.

USAF Sources Reported Under MRR?

Any facility subject to the MRR (per the above discussion and Figure 1) must submit an annual GHG report. For these facilities, the annual GHG report must cover stationary fuel combustion sources (subpart C of this part), miscellaneous use of carbonates (subpart U of this part), and all applicable source categories listed in Table A-3 and Table A-4 of Subpart A.

This translates to mean that only the following USAF sources should be included:

- General Stationary Fuel Combustion Sources:
 - o Includes, but are not limited to:
 - Boilers,
 - Simple and combined-cycle combustion turbines,
 - Engines,
 - Incinerators, and
 - Process heaters
 - Aircraft engine testing

- Does not include:
 - Portable equipment,
 - Emergency generators and emergency equipment,
 - Irrigation pumps at agricultural operations,
 - Pilot lights,
 - Flares.
 - Electricity generating units that are subject to 40 CFR subpart D, or
 - Unit that combusts hazardous waste (as defined in §261.3 of this chapter), unless either of the following conditions apply:
 - Continuous emission monitors (CEMS) are used to quantify CO mass emissions
 - Any fuel listed in Table C-1 of this subpart is also combusted in the unit

• Municipal Solid Waste (MSW) Landfills Sources:

- o Includes
 - Landfills.
 - Landfill gas collection systems, and
 - Landfill gas destruction devices (including flares)
- Applies to MSW landfills that accepted waste on or after January 1, 1980, unless all three of the following conditions apply:
 - The MSW landfill did not receive waste on or after January 1, 2013,
 - The MSW landfill had CH₄ generation of less than 1,190 metric tons of CH₄ in the 2013 reporting year, and
 - The owner or operator of the MSW landfill was not required to submit an annual report under any requirement of this part in any reporting year prior to 2013
- o Does not include:
 - Resource Conservation and Recovery Act (RCRA) Subtitle C hazardous waste landfills,
 - Toxic Substances Control Act (TSCA) hazardous waste landfills,
 - Construction and demolition waste landfills, or
 - Industrial waste landfills

• <u>Electrical Transmission and Distribution Equipment Sources:</u>

 Includes all electric transmission and distribution equipment and servicing inventory insulated with or containing sulfur hexafluoride (SF6) or perfluorocarbons (PFCs) used within an electric power system

The following sources should not be included in any USAF facility's annual GHG MRR report:

- Industrial Wastewater Treatment Systems (DOES NOT APPLY TO ANY USAF SYSTEMS) or
- Industrial Waste Landfills (DOES NOT APPLY TO ANY USAF LANDFILLS)

Of particular concern is 40 CFR 98 Subpart C, since this is the Subpart impacting the Air Force the most. Subpart C establishes requirements for Stationary Fuel Combustion Sources. Stationary Fuel Combustion Sources are devices that combust solid, liquid, or gaseous fuel, generally for the purposes of producing electricity, generating steam, or providing useful heat or energy for industrial, commercial, or institutional use, or reducing the volume of waste by removing combustible matter.

For the purposes of General Stationary Fuel Combustion (40 CFR 98, Subpart C), the emissions from emergency generators, emergency equipment, portable equipment, and flares should be excluded. Hazardous waste combustion should only include emissions from co-fired fossil fuels and not from hazardous waste. Emissions from biomass-derived fuels should exclude CO_2 emissions but include CH_4 and N_2O emissions. GHG emissions from pilot lights are also not to be included. A pilot light is a small auxiliary flame that ignites the burner of a combustion device when the control valve opens.

How to Estimate GHG Emissions?

The most current USAF Stationary Source Guide should be consulted and utilized to calculate emissions for applicability and compliance with the MRR. When calculating GHG emissions it is important to recognize that not all GHGs are equal. Each GHG has a different capacity to trap heat; this is known as the Global Warming Potential (GWP). Each GHG (other than CO₂) has an associated multiplier to account for their GWP. For example, Methane (CH₄) has a multiplier (GWP) of 25, meaning 1 metric ton of Methane (CH₄) is the same as 25 metric tons of Carbon Dioxide (CO₂). Carbon Dioxide is the reference gas used for the MRR; therefore, emissions are reported in terms of carbon dioxide equivalents (CO₂e), which represents the number of metric tons of carbon dioxide emissions with the same GWP as one metric ton of the subject gas. Emissions are calculated by multiplying energy values by emissions factors. These factors incorporate the emissions of carbon dioxide, methane, and nitrous oxide, to provide a single CO₂e value.

The GHGs that are subject to the rule are carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons and other fluorinated gases

• Carbon Dioxide (CO₂): CO₂ enters the atmosphere via the combustion of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and as a result of other chemical reactions. CO₂ is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

- Methane (CH₄): CH₄ is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices, as well as by the decay of organic waste in municipal solid waste landfills.
- Nitrous Oxide (N_2O): N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste.
- **Fluorinated Gases:** Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are powerful synthetic greenhouse gases that are emitted from a variety of industrial processes. These gases are usually emitted in smaller quantities, but they are potent greenhouse gases and have a high GWP.

A facility subject to the MRR needs to ensure data integrity. Measures should be taken to accurately and consistently compile and analyze the emission data to not only document compliance and to determine when the facility is no longer subject to the rule, but to also provide the EPA with reliable data to base future GHG policy and regulations.

MRR Reporting:

Any facility subject to the MRR (per the discussion and flow chart above in Figure 1) must submit an annual GHG report no later than March 31 of each calendar year for GHG emissions in the previous calendar year. Affected facilities are required to submit annual reports that contain data needed to quantify, characterize, and verify GHG emissions along with additional related information. The specific data required to be reported varies depending on the source category. The annual reports are submitted to EPA electronically using an electronic Greenhouse Gas Reporting Tool (e-GGRT), which is accessed through the EPA's e-GGRT website. The resulting data is made available to the general public through the EPA's online tool, Facility Level Information on Green House Gases Tool (FLIGHT).

MRR Exit Strategy:

The MRR is not a once in, always in requirement. The provisions of 40 CFR 98.2(i) can potentially allow installations who accidentally/voluntarily report and installations that are subject to MRR to cease reporting (see Figure 2, USAF MRR Exit Strategy).

<u>Subject to the Rule Exit</u>: The provisions of 40 CFR 98.2(i) allow installations subject to the rule to cease reporting if the required annual GHG reports demonstrate that reported GHG emissions are either:

- Less than 25,000 metric tons of CO2-e per year for 5 consecutive years, or
- Less than 15,000 metric tons of CO2-e per year for 3 consecutive years, or
- Installations may also cease reporting if <u>ALL</u> the GHG-emitting processes or operations are shut down.

When can my base stop reporting? Subject to MRR or accidental/voluntary reporting? Accidental or Subject to Voluntary MRR < 15K MT CO₂e < 15K MT CO₂e for for 3 consecutive the last 3 years? reported years to date? No < 25K MT CO₂e < 25K MT CO₂e for for 5 consecutive the last 5 years? reported years to No No Document emissions for years below threshold Notify EPA of GHG reporting is cessation of reporting & **NOT** required explain why **GHG** reporting and related Maintain records monitoring, and and documentation recordkeeping for 3 years IS STILL REQUIRED.

Figure 2, USAF MRR Exit Strategy

Installations must notify USEPA that they intend to cease reporting and explain the reasons for the reduction in emissions. Installations should continue to track GHG emissions. If emissions increase to 25,000 metric tons of CO2e per year or more, the installation must reinitiate annual reporting.

Accidentally or Voluntarily Reported Exit: In general, the GHG MRR will apply only to USAF installations that meet the threshold requirements listed in 40 CFR 98.2(a). If a facility has not ever actually met the threshold requirements, then the facility was never actually subject to the requirements of the MMR. The only facilities required to report and continue reporting are those that are subject to the rule. The MRR is explicit in 40 CFR §98.2(h) "an owner or operator of a facility or supplier that does not meet the applicability requirements of paragraph (a) of this section is not subject to this rule..." and then once a facility is subject to the requirements of the rule, they must continue to report until they meet the exit requirements. Therefore, if a facility was never subject to the rule in the first place, then they do not need to continue reporting.

However, facilities that accidentally or voluntarily reported should continue to annually report until they have met the provisions of 40 CFR 98.2(i) to cease reporting. 40 CFR 98.2(i) can also be applied retroactively to allow installations who accidentally or voluntarily reported to cease reporting if they can demonstrate that GHG emissions are either:

- Less than 25,000 metric tons of CO₂e per year for the past 5 years, or
- Less than 15,000 metric tons of CO₂e per year for the past 3 years.

Installations will still need to notify USEPA that they intend to cease reporting and explain the reasons for ceasing reporting. The installations should continue to track GHG emissions. If emissions increase to 25,000 metric tons of CO₂e per year or more, the installation must reinitiate annual reporting.