Using e-GGRT to Prepare Your Subpart Q Report for RY2014 and Later Years

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If you reported for the previous reporting year, the Agency has
carried some of your data from last year into the current
reporting year to reduce the reporting burden. It is still your
responsibility to review and ensure that all of the information
in your submission is correct, but the Agency believes that most
of the data that is carried forward is unlikely to change
significantly from year to year. For more information about carry
forward data, please see the Carry forward of data from previous
submissions help content
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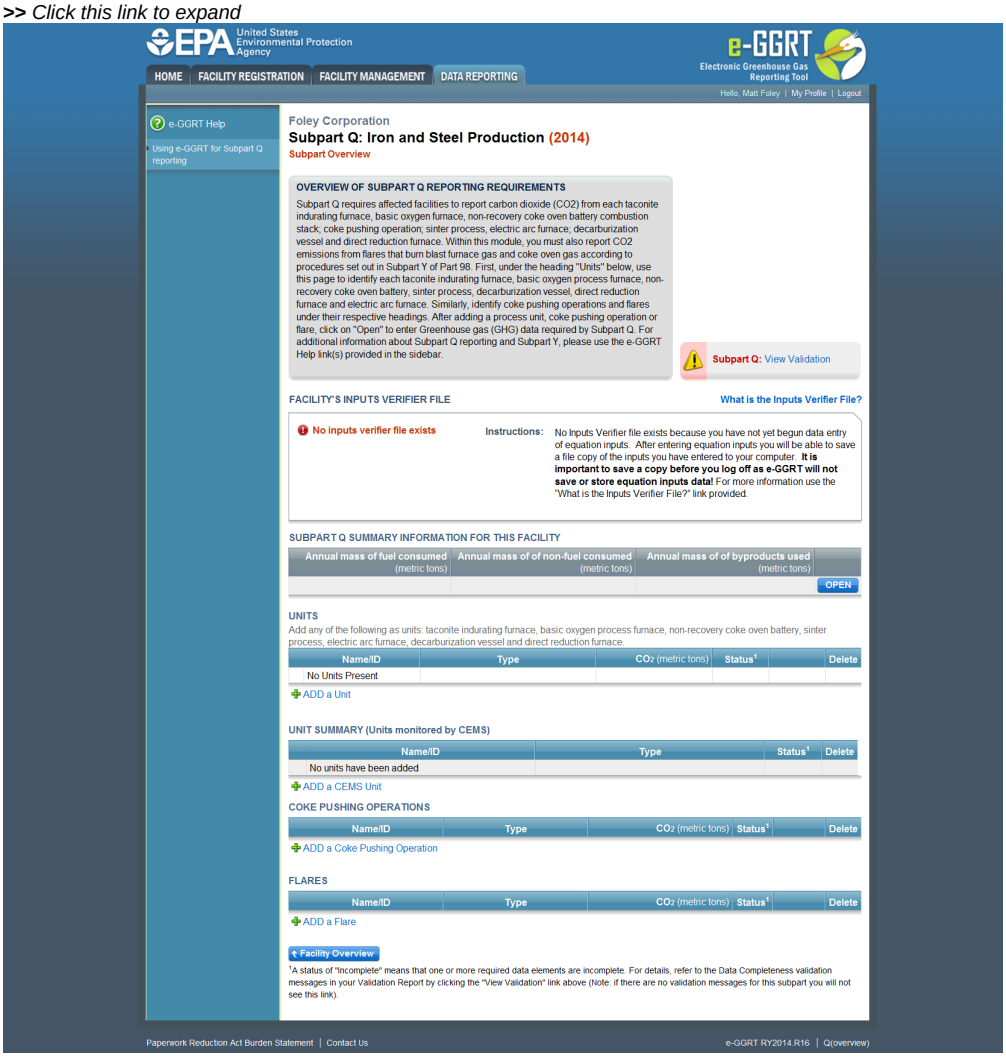
Subpart Q consists of facilities with any of the following processes: taconite iron ore processing, integrated iron and steel manufacturing, coke making not collocated with an integrated iron and steel manufacturing process, direct reduction not collocated with an integrated iron and steel manufacturing process and electric arc furnace (EAF) steelmaking not collocated with an integrated iron and steel manufacturing process. Note for by-product recovery coke oven battery combustion stacks, blast furnace stoves, boilers, process heaters, reheat furnaces, annealing furnaces, flame suppression, ladle reheaters, and other miscellaneous combustion sources you should review the reporting instructions for Subpart C.

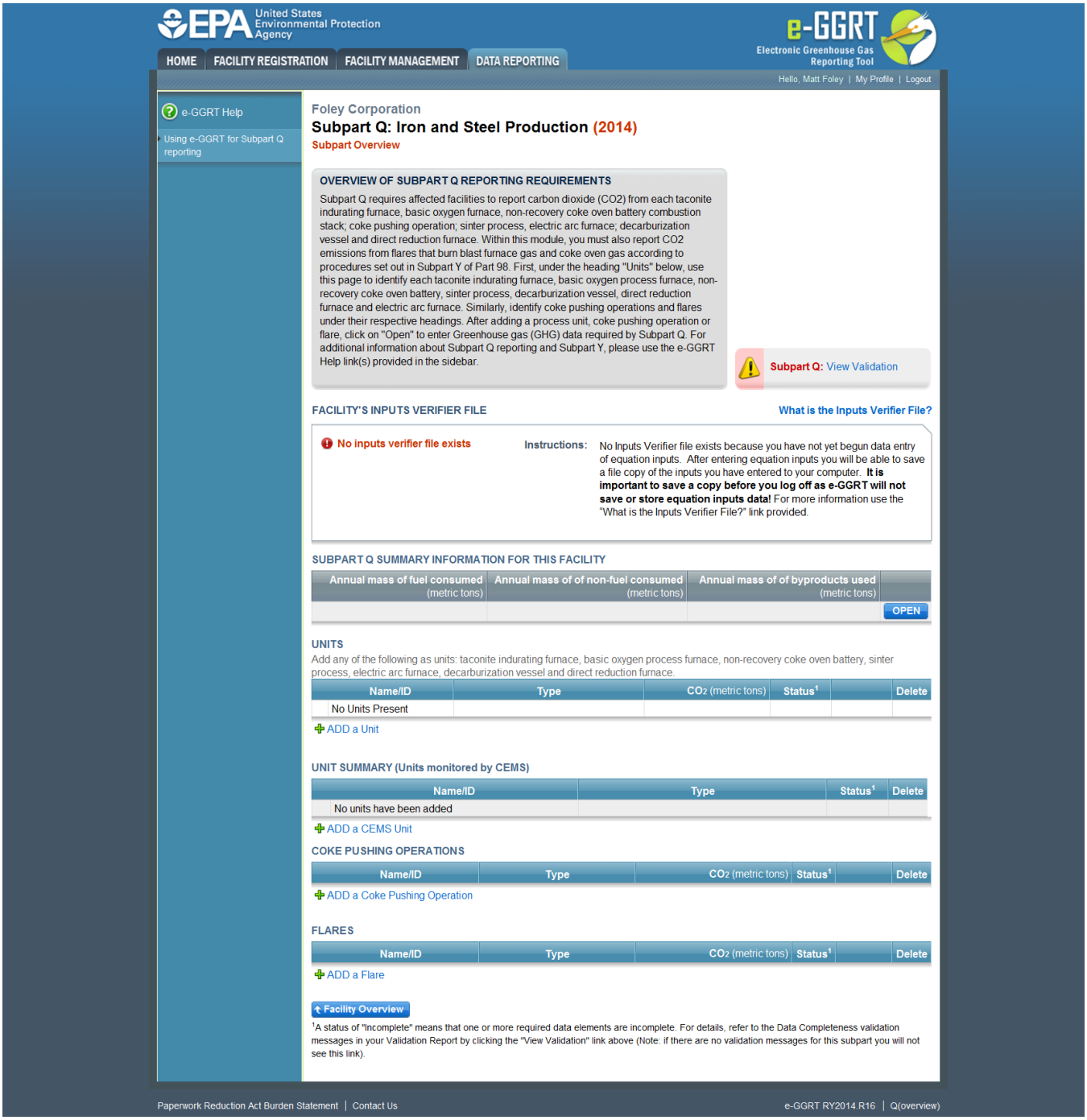
This page provides an overview of subtopics that are central to Subpart Q reporting. This information is entered from the e-GGRT Subpart Q Overview web form shown below. Each topic represents a key web form(s) where you need to enter information:

- Subpart Q Summary Information for the Facility
- Subpart Q Unit Information
- Subpart Q Emissions Information
- Subpart Q Coke Pushing Operation Information
- Subpart Q Flares Information
- Subpart Q Validation Report

The end of the page provides links you can use for more detailed information and instructions on entering required information related to each of these topics.

>> *Click this link to expand*





Subpart Q Summary Information for the Facility

Subpart Q requires you to report the following data about your facility:

- Annual mass of all gaseous, liquid, and solid fuels (combined) (metric tons)
- Weighted average carbon content of all gaseous, liquid, and solid fuels (weight fraction, decimal)
- Annual mass of all non-fuel material inputs (combined) (metric tons)
- Weighted average carbon content of all non-fuel material inputs (combined) (weight fraction, decimal)
- Annual mass of all solid and liquid products and byproducts (combined) (metric tons)
- Weighted average carbon content of all solid and liquid products and byproducts (combined) (weight fraction, decimal)

Subpart Q Unit Information

The required process unit information and the forms associated with required unit information entered into e-GGRT are different for units that are monitored by a Continuous Emissions Monitoring System (CEMS) and units that are NOT monitored by CEMS.

As a result, separate help content has been created in this subpart for entering process unit information for units monitored by CEMS and units NOT monitored by CEMS.

For each process unit that is NOT monitored by CEMS at your facility, the following unit information is required:

- An indication of the calculation methodology used to estimate quantities of CO_2 for this unit (Carbon mass balance method or Site-specific emission factor method)
- A unique name or identifier, plus optional description for this process unit
- The type of process unit
- The name and type of each input and output associated with the process unit (*Note: This requirement applies only if carbon mass balance method is used to estimate CO_2 process emissions for the unit. If you have a process input or output other than CO_2 in the exhaust gas that contains carbon that is not included in Equations Q-1 through Q-7 of this section, you must account for the carbon content and mass rate of that process input or output in your calculations according to the procedures in §98.174(b)(5). See also the exception in 98.174(b)(4).*)

For each process unit that is monitored by CEMS at your facility, the following unit information is required:

- A unique name or identifier for the process unit, plus optional description of the unit
- The type of process unit, selected from the following:
  - Taconite indurating furnace
  - Basic oxygen process furnace
  - Non-recovery coke oven battery
  - Sinter process
  - Electric arc furnace (EAF)
  - Decarburization vessel (see note below)
  - Direct reduction furnace
- Annual production of taconite pellets (metric tons)
- Annual production of molten raw steel (metric tons)
- Annual production of coke (metric tons)
- Annual production of sinter (metric tons)
- Annual production of direct reduced iron (metric tons)

> ⚠ In 2010, the information required for decarburization vessels applied only to argon-oxygen decarburization vessels. However, for 2011 and subsequent calendar years, the reporting requirements apply to other decarburization vessels used to refine molten steel with the primary intent of removing carbon content of steel including, but not limited to, argon-oxygen decarburization vessels and vacuum oxygen decarburization vessels. This amendment was finalized in October 2010 (75 FR 66434).

Subpart Q Coke Pushing Operations Information

For each coke pushing operation at your facility, the following information is required:

- A unique name or identifier, plus optional description

Subpart Q Flares Information

For each flare at your facility, the following information is required:

- A unique name or identifier, plus optional description
- The type of flare
- The flare service type
- The method used to calculate the CO_2 emissions

Subpart Q Emissions Information

The required emissions information and the manner by which required emissions information is entered into e-GGRT is different for process units that are monitored by a Continuous Emissions Monitoring System (CEMS), process units that are NOT monitored by a CEMS, coke pushing operations, and flares.

As a result, separate help content has been created in this subpart for entering emissions information for each emissions source type.

For each process unit that is NOT monitored by CEMS at your facility, the following information is required:

- Where the annual CO_2 process emissions (e.g. the results from Equation Q-1, in metric tons)
- For each input and output assigned to a process unit for which emissions will be estimated using the carbon mass balance method, also enter the following substitute data information:
  - The annual mass or volume is based on one or more substitute monthly data values
  - The number of months that missing data procedures were followed, if applicable (*If not applicable, you must enter zero to avoid data completeness validation error messages on the validation report*)
  - The method used to develop the substitute data value(s), if applicable
  - The carbon content determination method

For each CEMS Monitoring Location (CML), the following information is required:

- A unique unit name or identifier for the CML (see also About Unique Unit Names)
- An optional description or label for the CML
- The configuration of processes or process units that are monitored by the CML:
    - Single industrial process or process unit that exhausts to a dedicated stack
    - Multiple industrial processes or process units share a common stack
    - Industrial process or process unit shares a common stack with one or more stationary fuel combustion units
- The name of each fuel combusted in the unit(s) monitored by the CEMS
- The Tier 4/CEMS methodology start and end dates
- The cumulative total of hourly CO_2 mass emissions for each quarter of the reporting year (in metric tons) (*Do not cumulate emissions data between quarters*)
- The total annual CO2 mass emissions measured by the CEMS (in metric tons)
- An indication whether emissions reported for the CEMS include emissions calculated according to 98.33(a)(4)(viii) for a slipstream that bypassed the CEMS
- The total annual biogenic CO_2 emissions from the combustion of all biomass fuels combined (in metric tons) (*if applicable*)
- The total annual non-biogenic CO_2 emissions (includes fossil fuel, sorbent, and process CO_2 emissions, in metric tons)
- The total annual CH_4 and N_2O emissions associated with the combustion of all Table C-2 fuels combusted in all processes/process units monitored by the CEMS calculated using Equation C-10 (in metric tons) (*if there are no combustion emissions in this CML, please enter zero*)
- The total number of source operating hours in the reporting year
- The total operating hours in which a substitute data value was used in the emissions calculations for the CO_2 concentration parameter
- The total operating hours in which a substitute data value was used in the emissions calculations for the stack gas flow rate parameter
- If moisture correction is required and a continuous moisture monitor is used, the total operating hours in which a substitute data value was used in the emissions calculations for the stack gas moisture content parameter
- An indication of the process units monitored by the CML

For each coke pushing operation at your facility, the following information is required:

- The annual CO_2 process emissions (in metric tons) [See 98.176(c)]

For each flare at your facility, the following information is required:

- The annual CO_2 emissions from each flare (the output of Equation Y-1a, Y-1b, Y-2, or Y-3 depending on the calculation method used for this flare, in metric tons) [98.256(e)(4)]
- The annual CH_4 emissions from each flare (the output of Equation C-9a, in metric tons) [98.33(c)(2) as required by 98.172(b)]
- The annual N_2O emissions from each flare (the output of Equation C-9a, in metric tons) [98.33(c)(2) as required by 98.172(b)]

For each flare using the **Equation Y-1a** calculation method, Subpart Q requires you to enter the following supplemental emissions information:

- An indication of whether daily or weekly measurement periods are used [98.256(e)(6)]
- The annual volume of flare gas combusted (in scf) [98.256(e)(6)]
- The specific consensus-based standard method number or description of the procedure specified by the flow meter manufacturer [98.256(q)]
- The number of days during the reporting year missing data procedures were used to determine the volume of flare gas combusted
- The annual average molecular weight (in kg/kg-mole) [98.256(e)(6)]
- The method used to measure molecular weight [98.256(q)]
    - Method 18 at 50 CFR part 60, appendix A-6
    - ASTM D1945-03
    - ASTM D1946-90 (Reapproved 2006)
    - GPA 2261-00
    - UOP539-97
    - ASTM D2503-92 (Reapproved 2007)
    - Chromatographic analysis: manufacturer's instructions
    - Other (specify)
        - Specify other method
- The number of days during the reporting year missing data procedures were used to determine molecular weight
- The annual average carbon content of the flare gas (kg carbon/kg flare gas) [98.256(e)(6)]
- The method used to measure carbon content [98.256(q)]
    - Method 18 at 40 CFR part 60, appendix A-6
    - ASTM D1945-03
    - ASTM D1946-90 (Reapproved 2006)
    - GPA 2261-00
    - UOP539-97
    - ASTM D2503-92 (Reapproved 2007)
    - Chromatographic analysis: manufacturer's instructions
    - Other (specify)
        - Specify other method
- The number of days during the reporting year missing data procedures were used to determine carbon content

For each flare using the **Equation Y-1b** calculation method, Subpart Q requires you to enter the following supplemental emissions information:

- An indication of whether daily or weekly measurement periods are used [98.256(e)(7)]
- The annual volume of flare gas combusted (in scf) [98.256(e)(7)]
- The specific consensus-based standard method number or description of the procedure specified by the flow meter manufacturer [98.256(q)]
- The number of days during the reporting year missing data procedures were used to determine the volume of flare gas combusted
- The annual average CO_2 concentration (in percent by volume or mole) [98.256(e)(7)]
- The method used to measure CO_2 concentration [98.256(q)]
    - Method 18 at 40 CFR part 60, appendix A-6

    - ASTM D1945-03
    - ASTM D1946-90 (Reapproved 2006)
    - GPA 2261-00
    - UOP539-97
    - ASTM D2503-92 (Reapproved 2007)
    - Chromatographic analysis: manufacturer's instructions
    - Other (specify)
        - Specify other method
- The number of days during the reporting year missing data procedures were used to determine CO_2 concentration
- For each carbon containing compound other than CO_2 in the flare gas stream identified by the facility, and for each flare using the Equation Y-1b, the system shall require the facility to identify:
- The annual average concentration of the compound (in percent by volume or mole) [98.256(e)(7)(i)]
- The method used to measure concentration of the compound [98.256(q)]
    - Method 18 at 40 CFR part 60, appendix A-6
    - ASTM D1945-03
    - ASTM D1946-90 (Reapproved 2006)
    - GPA 2261-00
    - UOP539-97
    - ASTM D2503-92 (Reapproved 2007)
    - Chromatographic analysis: manufacturer's instructions
    - Other (specify)
        - Specify other method
- The number of days during the reporting year missing data procedures were used to determine the concentration of the compound

For each flare using the **Equation Y-2** calculation method, Subpart Q requires you to enter the following supplemental emissions information:

- An indication of whether daily or weekly measurement periods are used [98.256(e)(8)]
- The annual volume of flare gas combusted (in MMscf) [98.256(e)(8)]
- The specific consensus-based standard method number or description of the procedure specified by the flow meter manufacturer [98.256(q)]
- The number of days during the reporting year missing data procedures were used to determine the volume of flare gas combusted
- The annual average higher heating value of the flare gas (MMBtu/MMscf) [98.256(e)(8)]
- The method used to measure higher heating value of the flare gas [98.256(q)]
    - ASTM D4809-06
    - ASTM D240-02 (Reapproved 2007)
    - ASTM D1826-94 (Reapproved 2003)
    - ASTM D3588-98 (Reapproved 2003)
    - ASTM D4891-89 (Reapproved 2006)
    - Chromatographic analysis: manufacturer's instructions
    - Other (specify)
        - Specify other method
- The number of days during the reporting year missing data procedures were used to determine the higher heating value of the flare gas
- An indication of whether the annual volume of flare gas combusted was determined using standard conditions of 68 ºF and 14.7 psia or 60 ºF and 14.7 psia [98.256(e)(8)]
- An indication of whether the annual average higher heating value of the flare gas was determined using standard conditions of 68 ºF and 14.7 psia or 60 ºF and 14.7 psia [98.256(e)(8)]

For each flare using the **Equation Y-3** calculation method, Subpart Q requires you to enter the following supplemental emissions information:

- The total number of start-up, shutdown, or malfunction (SSM) events exceeding 500,000 scf/day [98.256(e)(9)]

Subpart Q Validation Report

The Validation Report assists you with determining the completeness and quality of your reported data.

We strongly encourage you to use the Validation Report to check your work. The Validation Report performs two types of checks:

- Data Completeness: Data required for reporting that are missing or incomplete.
- Data Quality: Data that are outside of the expected range of values.

Certain validation checks which are considered to represent critical errors must be corrected before you can successfully generate and submit your Annual Report. These checks are signified with a stop sign

. If you feel that you have triggered one of these critical “stop signs” checks in error, or if there’s a reason why your report should be submitted despite the check being triggered, please submit a request to the e-GGRT Help Desk at GHGReporting@epa.gov.

You may view the Validation Report at any time.

> Note that the Validation Report is intended to assist users in entering data, **but it is not an indication that the reporter has entered all necessary information, nor is it an indication that the reporter is in compliance with part 98**. Furthermore, a negative finding on the validation report is not a guarantee that a data element was entered incorrectly. For more detail on the Validation Report and its functionality please review the Subpart Validation Report page.

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See Also

Using e-GGRT to Prepare Your Subpart Q Report for RY2014 and Later Years

- Subpart Q Summary Information for this Facility for RY2014 and Later Years
- Subpart Q Process Unit Information for Units NOT Monitored by CEMS for RY2014 and Later Years
- Subpart Q Process Unit Information for Units Monitored by CEMS for RY2014 and Later Years
- Subpart Q Coke Pushing Operations Information for RY2014 and Later Years
- Subpart Q Flares Information for RY2014 and Later Years
- Subpart Q Emissions Information for Units NOT Monitored by CEMS for RY2014 and Later Years
- Subpart Q Emissions Information for Units Monitored by CEMS for RY2014 and Later Years
- Subpart Q Emissions Information for Coke Pushing Operations for RY2014 and Later Years
- Subpart Q Emissions Information for Flares for RY2014 and Later Years
- Subpart Q Entering Equation Inputs Using IVT

Screen Errors
Subpart Validation Report