

owner or operator shall document and keep records of the procedures used for all such estimates.

(d) For hydrogen plants, use the missing data procedures in subpart P of this part.

**§ 98.256 Data reporting requirements.**

In addition to the reporting requirements of § 98.3(c), you must report the information specified in paragraphs (a) through (q) of this section.

(a) For combustion sources, follow the data reporting requirements under subpart C of this part (General Stationary Fuel Combustion Sources).

(b) For hydrogen plants, follow the data reporting requirements under subpart P of this part (Hydrogen Production).

(c)-(d) [Reserved]

(e) For flares, owners and operators shall report:

(1) The flare ID number (if applicable).

(2) A description of the type of flare (steam assisted, air-assisted).

(3) A description of the flare service (general facility flare, unit flare, emergency only or back-up flare).

(4) The calculated CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O annual emissions for each flare, expressed in metric tons of each pollutant emitted.

(5) A description of the method used to calculate the CO<sub>2</sub> emissions for each flare (e.g., reference section and equation number).

(6) If you use Equation Y-1 of this subpart, the annual volume of flare gas combusted (in scf/year) and the annual average molecular weight (in kg/kg-mole) and carbon content of the flare gas (in kg carbon per kg flare gas).

(7) If you use Equation Y-2 of this subpart, the annual volume of flare gas combusted (in million (MM) scf/year) and the annual average higher heating value of the flare gas (in MMBtu per MMscf).

(8) If you use Equation Y-3 of this subpart, the annual volume of flare gas combusted (in MMscf/year) during normal operations, the annual average higher heating value of the flare gas (in MMBtu/MMscf), the number of SSM events exceeding 500,000 scf/day, and the volume of gas flared (in scf/event) and the average molecular weight (in

kg/kg-mole) and carbon content of the flare gas (in kg carbon per kg flare) for each SSM event over 500,000 scf/day.

(9) The fraction of carbon in the flare gas contributed by methane used in Equation Y-4 of this subpart and the basis for its value.

(f) For catalytic cracking units, traditional fluid coking units, and catalytic reforming units, owners and operators shall report:

(1) The unit ID number (if applicable).

(2) A description of the type of unit (fluid catalytic cracking unit, thermal catalytic cracking unit, traditional fluid coking unit, or catalytic reforming unit).

(3) Maximum rated throughput of the unit, in bbl/stream day.

(4) The calculated CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O annual emissions for each unit, expressed in metric tons of each pollutant emitted.

(5) A description of the method used to calculate the CO<sub>2</sub> emissions for each unit (e.g., reference section and equation number).

(6) If you use a CEMS, the relevant information required under § 98.36(e)(2)(vi) for the Tier 4 Calculation Methodology, the CO<sub>2</sub> annual emissions as measured by the CEMS (unadjusted to remove CO<sub>2</sub> combustion emissions associated with a CO boiler, if present) and the process CO<sub>2</sub> emissions as calculated according to § 98.253(c)(1)(ii). Report the CO<sub>2</sub> annual emissions associated with fuel combustion under subpart C of this part (General Stationary Fuel Combustion Sources).

(7) If you use Equation Y-6 of this subpart, the annual average exhaust gas flow rate, %CO<sub>2</sub>, and %CO.

(8) If you use Equation Y-7 of this subpart, the annual average flow rate of inlet air and oxygen-enriched air, %O<sub>2</sub>, %O<sub>oxy</sub>, %CO<sub>2</sub>, and %CO.

(9) If you use Equation Y-8 of this subpart, the coke burn-off factor, annual throughput of unit, and the average carbon content of coke and the basis for the value.

(10) Indicate whether you use a measured value, a unit-specific emission factor, or a default emission factor for CH<sub>4</sub> emissions. If you use a unit-specific emission factor for CH<sub>4</sub>, report the

units of measure for the unit-specific factor, the activity data for calculating emissions (e.g., if the emission factor is based on coke burn-off rate, the annual quantity of coke burned), and the basis for the factor.

(11) Indicate whether you use a measured value, a unit-specific emission factor, or a default emission factor for N<sub>2</sub>O emissions. If you use a unit-specific emission factor for N<sub>2</sub>O, report the units of measure for the unit-specific factor, the activity data for calculating emissions (e.g., if the emission factor is based on coke burn-off rate, the annual quantity of coke burned), and the basis for the factor.

(12) If you use Equation Y-11 of this subpart, the number of regeneration cycles during the reporting year, the average coke burn-off quantity per cycle, and the average carbon content of the coke.

(g) For fluid coking unit of the flexicoking type, the owner or operator shall report:

(1) The unit ID number (if applicable).

(2) A description of the type of unit.

(3) Maximum rated throughput of the unit, in bbl/stream day.

(4) Indicate whether the GHG emissions from the low heat value gas are accounted for in subpart C of this part or § 98.253(c).

(5) If the GHG emissions for the low heat value gas are calculated at the flexicoking unit, also report the calculated annual CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions for each unit, expressed in metric tons of each pollutant emitted, and the applicable equation input parameters specified in paragraphs (f)(7) through (f)(11) of this section.

(h) For sulfur recovery plants and for emissions from sour gas sent off-site for sulfur recovery, the owner and operator shall report:

(1) The plant ID number (if applicable).

(2) Maximum rated throughput of each independent sulfur recovery plant, in metric tons sulfur produced/stream day.

(3) The calculated CO<sub>2</sub> annual emissions for each sulfur recovery plant, expressed in metric tons. The calculated annual CO<sub>2</sub> emissions from sour gas

sent off-site for sulfur recovery, expressed in metric tons.

(4) If you use Equation Y-12 of this subpart, the annual volumetric flow to the sulfur recovery plant (in scf/year) and the annual average mole fraction of carbon in the sour gas (in kg-mole C/kg-mole gas).

(5) If you recycle tail gas to the front of the sulfur recovery plant, indicate whether the recycled flow rate and carbon content are included in the measured data under § 98.253(f)(2) and (3). Indicate whether a correction for CO<sub>2</sub> emissions in the tail gas was used in Equation Y-12. If so, then report the value of the correction, the annual volume of recycled tail gas (in scf/year) and the annual average mole fraction of carbon in the tail gas (in kg-mole C/kg-mole gas). Indicate whether you used the default (95%) or a unit specific correction, and if used, report the approach used.

(6) If you use a CEMS, the relevant information required under § 98.36(e)(2)(vi) for the Tier 4 Calculation Methodology, the CO<sub>2</sub> annual emissions as measured by the CEMS and the annual process CO<sub>2</sub> emissions calculated according to § 98.253(f)(1). Report the CO<sub>2</sub> annual emissions associated with fuel combustion subpart C of this part (General Stationary Fuel Combustion Sources).

(i) For coke calcining units, the owner and operator shall report:

(1) The unit ID number (if applicable).

(2) Maximum rated throughput of the unit, in metric tons coke calcined/stream day.

(3) The calculated CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O annual emissions for each unit, expressed in metric tons of each pollutant emitted.

(4) A description of the method used to calculate the CO<sub>2</sub> emissions for each unit (e.g., reference section and equation number).

(5) If you use Equation Y-13 of this subpart, annual mass and carbon content of green coke fed to the unit, the annual mass and carbon content of marketable coke produced, and the annual mass of coke dust collected in dust collection systems.

(6) If you use a CEMS, the relevant information required under

§ 98.36(e)(2)(vi) for the Tier 4 Calculation Methodology, the CO<sub>2</sub> annual emissions as measured by the CEMS and the annual process CO<sub>2</sub> emissions calculated according to § 98.253(g)(1). Report the CO<sub>2</sub> annual emissions associated with fuel combustion under subpart C of this part (General Stationary Fuel Combustion Sources).

(7) Indicate whether you use a measured value, a unit-specific emission factor or a default for CH<sub>4</sub> emissions. If you use a unit-specific emission factor for CH<sub>4</sub>, the unit-specific emission factor for CH<sub>4</sub>, the units of measure for the unit-specific factor, the activity data for calculating emissions (e.g., if the emission factor is based on coke burn-off rate, the annual quantity of coke burned), and the basis for the factor.

(8) If you use a site-specific emission factor in Equation Y-10 of this subpart, the site-specific emission factor and the basis of the factor.

(j) For asphalt blowing operations, the owner or operator shall report:

(1) The unit ID number (if applicable).

(2) The quantity of asphalt blown (in Million bbl) at the facility in the reporting year.

(3) The type of control device used to reduce methane (and other organic) emissions from the unit.

(4) The calculated annual CO<sub>2</sub> and CH<sub>4</sub> emissions for each unit, expressed in metric tons of each pollutant emitted.

(5) If you use Equation Y-14 of this subpart, the CO<sub>2</sub> emission factor used and the basis for the value.

(6) If you use Equation Y-15 of this subpart, the CH<sub>4</sub> emission factor used and the basis for the value.

(7) If you use Equation Y-16 of this subpart, the carbon emission factor used and the basis for the value.

(8) If you use Equation Y-17 of this subpart, the CH<sub>4</sub> emission factor used and the basis for the value.

(k) For delayed coking units, the owner or operator shall report:

(1) The cumulative annual CH<sub>4</sub> emissions (in metric tons of each pollutant emitted) for all delayed coking units at the facility.

(2) A description of the method used to calculate the CH<sub>4</sub> emissions for each

unit (e.g., reference section and equation number).

(3) The total number of delayed coking units at the facility, the total number of delayed coking drums at the facility, and for each coke drum or vessel: the dimensions, the typical gauge pressure of the coking drum when first vented to the atmosphere, typical void fraction, the typical drum outage (i.e. the unfilled distance from the top of the drum, in feet), and annual number of coke-cutting cycles.

(4) For each set of coking drums that are the same dimensions: The number of coking drums in the set, the height and diameter of the coke drums (in feet), the cumulative number of vessel openings for all delayed coking drums in the set, the typical venting pressure (in psig), void fraction (in cf gas/cf of vessel), and the mole fraction of methane in coking gas (in kg-mole CF<sub>4</sub>/kg-mole gas, wet basis).

(5) The basis for the volumetric void fraction of the coke vessel prior to steaming and the basis for the mole fraction of methane in the coking gas.

(1) For process vents subject to § 98.253(j), the owner or operator shall report:

(1) The vent ID number (if applicable).

(2) The unit or operation associated with the emissions.

(3) The type of control device used to reduce methane (and other organic) emissions from the unit, if applicable.

(4) The calculated annual CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions for each vent, expressed in metric tons of each pollutant emitted.

(5) The annual volumetric flow discharged to the atmosphere (in scf), mole fraction of each GHG above the concentration threshold, and for intermittent vents, the number of venting events and the cumulative venting time.

(m) For uncontrolled blowdown systems, the owner or operator shall report:

(1) The cumulative annual CH<sub>4</sub> emissions (in metric tons of each pollutant emitted) for uncontrolled blowdown systems.

(2) The total quantity (in Million bbl) of crude oil plus the quantity of intermediate products received from off-site

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that are processed at the facility in the reporting year.

(3) The methane emission factor used for uncontrolled blowdown systems and the basis for the value.

(n) For equipment leaks, the owner or operator shall report:

(1) The cumulative CH<sub>4</sub> emissions (in metric tons of each pollutant emitted) for all equipment leak sources.

(2) The method used to calculate the reported equipment leak emissions.

(3) The number of each type of emission source listed in Equation Y-21 of this subpart at the facility.

(o) For storage tanks, the owner or operator shall report:

(1) The cumulative annual CH<sub>4</sub> emissions (in metric tons of each pollutant emitted) for all storage tanks, except for those used to process unstabilized crude oil.

(2) The method used to calculate the reported storage tank emissions for storage tanks other than those processing unstabilized crude (AP-42, TANKS 4.09D, Equation Y-22 of this subpart, other).

(3) The total quantity (in MMbbl) of crude oil plus the quantity of intermediate products received from off-site that are processed at the facility in the reporting year.

(4) The cumulative CH<sub>4</sub> emissions (in metric tons of each pollutant emitted) for storage tanks used to process unstabilized crude oil.

(5) The method used to calculate the reported storage tank emissions for storage tanks processing unstabilized crude oil.

(6) The quantity of unstabilized crude oil received during the calendar year (in MMbbl), the average pressure differential (in psi), and the mole fraction of CH<sub>4</sub> in vent gas from the unstabilized crude oil storage tank, and the basis for the mole fraction.

(7) The tank-specific methane composition data and the gas generation rate data, if you did not use Equation Y-23.

(p) For loading operations, the owner or operator shall report:

(1) The cumulative annual CH<sub>4</sub> emissions (in metric tons of each pollutant emitted) for loading operations.

(2) The quantity and types of materials loaded by vessel type (barge,

tanker, marine vessel, etc.) that have an equilibrium vapor-phase concentration of methane of 0.5 volume percent or greater, and the type of vessels in which the material is loaded.

(3) The type of control system used to reduce emissions from the loading of material with an equilibrium vapor-phase concentration of methane of 0.5 volume percent or greater, if any (submerged loading, vapor balancing, etc.).

(q) Name of each method listed in § 98.254 or a description of manufacturer's recommended method used to determine a measured parameter.

### § 98.257 Records that must be retained.

In addition to the records required by § 98.3(g), you must retain the records of all parameters monitored under § 98.255.

### § 98.258 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

## Subpart Z—Phosphoric Acid Production

### § 98.260 Definition of the source category.

The phosphoric acid production source category consists of facilities with a wet-process phosphoric acid process line used to produce phosphoric acid. A wet-process phosphoric acid process line is the production unit or units identified by an individual identification number in an operating permit and/or any process unit or group of process units at a facility reacting phosphate rock from a common supply source with acid.

### § 98.261 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains a phosphoric acid production process and the facility meets the requirements of either § 98.2(a)(1) or (a)(2).

### § 98.262 GHGs to report.

(a) You must report CO<sub>2</sub> process emissions from each wet-process phosphoric acid process line.

(b) You must report under subpart C of this part (General Stationary Fuel