

1 **Subpart A of 40 CFR 98, As Modified by Proposed 20.2.300 NMAC –**  
 2 **Reporting of Greenhouse Gas Emissions**  
 3

4 plain text = unchanged EPA rule language

5 underline = added by 20.2.300 NMAC (NMED-Musick Rebuttal Exhibit 1)

6 ~~strikeout~~ = deleted by 20.2.300 NMAC (NMED-Musick Rebuttal Exhibit 1)

7 *Note: This version of 40 CFR 98 Subpart A includes amendments published on July 12, 2010*  
 8 *(75 FR 39736) and September 22, 2010 (75 FR 57669), and Technical Corrections as signed*  
 9 *by the EPA Administrator on October 7, 2010. These EPA amendments are incorporated as*  
 10 *plain text, not underline/strikeout.*

11  
 12 **Subpart A—General Provisions**

13 **§ 98.1 Purpose and scope.**

14 (a) This part establishes mandatory greenhouse gas (GHG) reporting requirements for owners  
 15 and operators of certain facilities that directly emit GHG ~~as well as for certain fossil fuel~~  
 16 ~~suppliers and industrial GHG suppliers. For suppliers, the GHGs reported are the quantity that~~  
 17 ~~would be emitted from combustion or use of the products supplied.~~

18 (b) Owners and operators of facilities ~~and suppliers~~ that are subject to this part must follow  
 19 the requirements of this subpart and all applicable subparts of this part. If a conflict exists  
 20 between a provision in subpart A and any other applicable subpart, the requirements of the  
 21 applicable subpart shall take precedence.

22 (c) Except as otherwise specifically provided<sup>1</sup>:

23 (1) Wherever the term “Administrator” is used in the rules incorporated by reference in this  
 24 rule, the term "secretary", meaning secretary of the New Mexico environment department,  
 25 shall be substituted.

26 (2) Wherever the term “EPA” is used in the rules incorporated by reference in this rule, the  
 27 term "department", meaning the New Mexico environment department, shall be substituted,  
 28 except in section 98.7, subsection 98.33(5), and subpart D of 40 CFR 98, and in reference to  
 29 EPA publications and EPA methods published elsewhere than in 40 CFR 98.

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<sup>1</sup> These changes implemented in Definitions, 20.2.300.7 NMAC.

Subpart A-General Provisions

1 (d) The following emissions data shall be submitted for information only and may not be  
2 subject to cap-and-trade requirements<sup>2</sup>:

3 (1) Emissions data calculated with a methodology identified as “reporting only.”

4 (2) Data submitted by a facility not subject to verification under 20.2.301 NMAC.

5 (e) On approval by the secretary, reports that conform to this part and that are submitted to  
6 the EPA GHG reporting system shall be deemed to satisfy, in whole or in part, the requirement  
7 to submit a report under this part.<sup>3</sup>

8  
9 **§ 98.2 Who must report?**

10 (a) The GHG reporting requirements and related monitoring, recordkeeping, and reporting  
11 requirements of this part apply to the owners and operators of any facility that is located in the  
12 United States geographic area within the jurisdiction of the environmental improvement board  
13 and that meets the requirements of either paragraph (a)(1), (a)(2), or (a)(3) of this section; and  
14 any supplier that meets the requirements of paragraph (a)(4) of this section:

15 (1) A facility that contains, in any calendar year starting in 2011, any source category that  
16 is listed in Table A-3 of this subpart in any calendar year starting in 2010. For these facilities,  
17 the annual GHG report must cover stationary fuel combustion sources (subpart C);  
18 miscellaneous use of carbonates (subpart U), and all applicable source categories listed in  
19 Table A-3 and Table A-4 of this subpart 20.2.300.100 NMAC and 20.2.300.107 NMAC.

20 (2) A facility that contains containing any source category that is listed in 20.2.300.107  
21 NMAC, or in both Table A-4 of this subpart and 20.2.300.100 NMAC, that emits, in any  
22 calendar year starting in 2011, 10,000 25,000-metric tons CO<sub>2</sub>e or more per year in  
23 combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate,  
24 and all applicable source categories that are listed in in Table A-3 and Table A-4 of this  
25 subpart 20.2.300.100 NMAC and 20.2.300.107 NMAC. For these facilities, the annual GHG  
26 report must cover stationary fuel combustion sources (subpart C of this part), miscellaneous  
27 use of carbonates (subpart U of this part), and all applicable source categories listed in Table

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<sup>2</sup> See Definitions, 20.2.300.7 NMAC, for listing of specific emissions data designated as "reporting only". Exclusion from verification threshold determination and verification scope is implemented in Subsections A, E, and F of 20.2.301.100 NMAC.

<sup>3</sup> Implemented in 20.2.300.13 NMAC.

Subpart A-General Provisions

1 | ~~A-3 and Table A-4 of this subpart shall cover all source categories and GHGs for which~~  
2 | ~~calculation methodologies are provided in 20.2.300 NMAC.~~

3 | (3) ~~A facility that in any calendar year starting in 2010~~2011 ~~meets all three of the~~  
4 | ~~conditions listed in this paragraph (a)(3).~~ For these facilities, the annual GHG report must  
5 | cover emissions from stationary fuel combustion sources only.

6 | (i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this  
7 | section.

8 | (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion  
9 | units at the facility is ~~30-12~~ mmBtu/hr or greater.<sup>4</sup>

10 | (iii) The facility emits ~~25,000~~10,000 metric tons CO<sub>2</sub>e or more per year in combined  
11 | emissions from all stationary fuel combustion sources.

12 | ~~(4) A supplier that is listed in Table A-5 of this subpart. For these suppliers, the annual~~  
13 | ~~GHG report must cover all applicable products for which calculation methodologies are~~  
14 | ~~provided in the subparts listed in Table A-5 of this subpart.~~

15 | (5) Research and development activities are not considered to be part of any source  
16 | category defined in this part.

17 | (b) To calculate GHG emissions for comparison to the ~~25,000~~10,000<sup>5</sup> metric ton CO<sub>2</sub>e per  
18 | year emission threshold in paragraph (a)(2) of this section, the owner or operator shall calculate  
19 | annual CO<sub>2</sub>e emissions, as described in paragraphs (b)(1) through (b)(4) of this section.

20 | (1) Calculate the annual emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and each fluorinated GHG in  
21 | metric tons from all applicable source categories listed in paragraph (a)(2) of this section. The  
22 | GHG emissions shall be calculated using the calculation methodologies specified in each  
23 | applicable subpart and available company records. Include emissions from only those gases  
24 | listed in Table A-1 of this subpart.

25 | (2) For each general stationary fuel combustion unit, calculate the annual CO<sub>2</sub> emissions  
26 | in metric tons using any of the four calculation methodologies specified in § 98.33(a).  
27 | Calculate the annual CH<sub>4</sub> and N<sub>2</sub>O emissions from the stationary fuel combustion sources in  
28 | metric tons using the appropriate equation in § 98.33(c). ~~Exclude carbon dioxide emissions~~

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<sup>4</sup> This threshold is scaled down proportionally to the lower reporting threshold of 10,000 metric tons CO<sub>2</sub>e: 12 mmBtu/hr = 30 mmBtu/hr \* 10,000/25,000.

<sup>5</sup> Implemented in Subsection A of 20.2.300.101 NMAC.

Subpart A-General Provisions

1 from the combustion of biomass, but include emissions of CH<sub>4</sub> and N<sub>2</sub>O from biomass  
2 combustion.

3 (i) For stationary combustion units, carbon dioxide emissions from the combustion of  
4 biomass fuels shall be included in determining whether a facility is subject to the reporting  
5 requirements of 20.2.300 NMAC with the following exception: A maximum of 15,000  
6 metric tons of carbon dioxide emissions from the combustion of pure solid biomass fuel  
7 may be excluded from calculation of GHG emissions for comparison to the 10,000 metric  
8 ton CO<sub>2</sub>e per year emission threshold in paragraph (a)(2) of this section, provided that  
9 total GHG emissions including emissions from solid biomass fuel are less than 25,000  
10 metric tons CO<sub>2</sub>e.

11 (ii) The exception in paragraph (b)(2)(i) of this section shall not apply in determining  
12 whether a facility is subject to the reporting requirements of 40 CFR Part 98.

13 (3) ~~For miscellaneous uses of carbonate, calculate the annual CO<sub>2</sub> emissions in metric tons~~  
14 ~~using the procedures specified in subpart U of this part.~~

15 (4) Sum the emissions estimates from paragraphs (b)(1), and (b)(2), and (b)(3) of this  
16 section for each GHG and calculate metric tons of CO<sub>2</sub>e using Equation A- 1 of this section.

17

$$18 \quad \text{CO}_2\text{e} = \sum_{i=1}^n \text{GHG}_i \times \text{GWP}_i \quad (\text{Eq. A-1})$$

19 Where:

20 CO<sub>2</sub>e = Carbon dioxide equivalent, metric tons/year.

21 GHG<sub>i</sub> = Mass emissions of each greenhouse gas listed in Table A-1 of this subpart,  
22 metric tons/year.

23 GWP<sub>i</sub> = Global warming potential for each greenhouse gas from Table A-1 of this  
24 subpart.

25 n = The number of greenhouse gases emitted.

26

27 (5) For purpose of determining if an emission threshold has been exceeded, include in the  
28 emissions calculation any CO<sub>2</sub> that is captured for transfer off site.

Subpart A-General Provisions

1 (c) To calculate GHG emissions for comparison to the ~~25,000~~10,000<sup>6</sup> metric ton CO<sub>2</sub>e/year  
2 emission threshold for stationary fuel combustion under paragraph (a)(3) of this section,  
3 calculate CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions from each stationary fuel combustion unit by following  
4 the methods specified in paragraph (b)(2) of this section. Then, convert the emissions of each  
5 GHG to metric tons CO<sub>2</sub>e per year using Equation A-1 of this section, and sum the emissions  
6 for all units at the facility.

7 ~~(d) To calculate GHG quantities for comparison to the 25,000 metric ton CO<sub>2</sub> per year  
8 threshold for importers and exporters of coal to liquid products under paragraph (a)(4)(i) of this  
9 section, calculate the mass in metric tons per year of CO<sub>2</sub> that would result from the complete  
10 combustion or oxidation of the quantity of coal to liquid products that are imported during the  
11 reporting year and that are exported during the reporting year. Calculate the emissions using the  
12 methodology specified in subpart LL of this part.~~

13 ~~(e) To calculate GHG quantities for comparison to the 25,000 metric ton CO<sub>2</sub>e per year  
14 threshold for importers and exporters of petroleum products under paragraph (a)(4)(ii) of this  
15 section, calculate the mass in metric tons per year of CO<sub>2</sub> that would result from the complete  
16 combustion or oxidation of the volume of petroleum products and natural gas liquids that are  
17 imported during the reporting year and that are exported during the reporting year. Calculate the  
18 emissions using the methodology specified in subpart MM of this part.~~

19 ~~(f) To calculate GHG quantities for comparison to the 25,000 metric ton CO<sub>2</sub>e per year  
20 threshold under paragraph (a)(4) of this section for importers and exporters of industrial  
21 greenhouse gases and for importers and exporters of CO<sub>2</sub>, the owner or operator shall calculate  
22 the mass in metric tons per year of CO<sub>2</sub>e imports and exports as described in paragraphs (f)(1)  
23 through (f)(3) of this section.~~

24 ~~(1) Calculate the mass in metric tons per year of CO<sub>2</sub>, N<sub>2</sub>O, and each fluorinated GHG  
25 that is imported and the mass in metric tons per year of CO<sub>2</sub>, N<sub>2</sub>O, and each fluorinated GHG  
26 that is exported during the year. Include only those gases listed in Table A-1 of this subpart.~~

27 ~~(2) Convert the mass of each imported and each GHG exported from paragraph (f)(1) of  
28 this section to metric tons of CO<sub>2</sub>e using Equation A-1 of this section.~~

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<sup>6</sup> Implemented in Subsection A of 20.2.300.101 NMAC.

## Subpart A-General Provisions

1       ~~(3) Sum the total annual metric tons of CO<sub>2</sub>e in paragraph (f)(2) of this section for all~~  
2       ~~imported GHGs. Sum the total annual metric tons of CO<sub>2</sub>e in paragraph (f)(2) of this section~~  
3       ~~for all exported GHGs.~~

4       (g) If a capacity or generation reporting threshold in paragraph (a)(1) of this section applies,  
5       the owner or operator shall review the appropriate records and perform any necessary  
6       calculations to determine whether the threshold has been exceeded.

7       (h) An owner or operator of a facility or supplier that does not meet the applicability  
8       requirements of paragraph (a) of this section is not subject to this rule. Such owner or operator  
9       would become subject to the rule and reporting requirements § 98.3(b)(3), if a facility or supplier  
10       exceeds the applicability requirements of paragraph (a) of this section at a later time. Thus, the  
11       owner or operator should reevaluate the applicability to this part (including the revising of any  
12       relevant emissions calculations or other calculations) whenever there is any change that could  
13       cause a facility or supplier to meet the applicability requirements of paragraph (a) of this section.  
14       Such changes include but are not limited to process modifications, increases in operating hours,  
15       increases in production, changes in fuel or raw material use, addition of equipment, and facility  
16       expansion.

17       (i) Except as provided in this paragraph, once a facility or supplier is subject to the  
18       requirements of this part, the owner or operator must continue for each year thereafter to comply  
19       with all requirements of this part, including the requirement to submit annual GHG reports, even  
20       if the facility or supplier does not meet the applicability requirements in paragraph (a) of this  
21       section in a future year.<sup>7</sup>

22       ~~(1) If reported emissions are less than 25,000 metric tons CO<sub>2</sub>e per year for five~~  
23       ~~consecutive years, then the owner or operator may discontinue complying with this part~~  
24       ~~provided that the owner or operator submits a notification to the Administrator that announces~~  
25       ~~the cessation of reporting and explains the reasons for the reduction in emissions. The~~  
26       ~~notification shall be submitted no later than March 31 of the year immediately following the~~  
27       ~~fifth consecutive year of emissions less than 25,000 tons CO<sub>2</sub>e per year. The owner or~~  
28       ~~operator must maintain the corresponding records required under § 98.3(g) for each of the five~~

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<sup>7</sup> As modified, section 98.2(i) covers only the circumstances under which a facility may cease reporting to the department under 20.2.300 NMAC. There are circumstances under which a facility might be eligible to cease reporting to EPA but must continue to report to the department. To determine whether these circumstances apply, the owner or operator should consult 40 CFR § 98.2(i).

Subpart A-General Provisions

1 consecutive years and retain such records for three years following the year that reporting was  
2 discontinued. The owner or operator must resume reporting if annual emissions in any future  
3 calendar year increase to ~~25,000~~ metric tons CO<sub>2</sub>e per year or more.

4 (2) If the operations of a facility change such that emissions fall below reported emissions  
5 are less than ~~15,000~~ 10,000 metric tons CO<sub>2</sub>e per year for three consecutive years, then the  
6 following reporting requirements shall apply:

7 (i) If, prior to the emission reduction, the facility was required to report under 20.2.300  
8 NMAC and to verify emissions under 20.2.301 NMAC, then the owner or operator shall  
9 continue to submit emission reports until reported emissions are below 10,000 metric tons  
10 CO<sub>2</sub>e per year for a minimum of three consecutive years. If reported emissions are less  
11 than 10,000 metric tons CO<sub>2</sub> per year for three consecutive years then the owner or  
12 operator may discontinue ~~complying with~~ submissions of annual emissions reports  
13 required by this part provided that the owner or operator submits a notification to the  
14 Administrator ~~department~~ that announces the cessation of reporting and explains the  
15 reasons for the reduction in emissions. The notification shall be submitted no later than  
16 March 31 of the year immediately following the third consecutive year of emissions less  
17 than ~~15,000~~ 10,000 tons CO<sub>2</sub>e per year. The owner or operator must maintain the  
18 corresponding records required under § 98.3(g) for each of the three consecutive years and  
19 retain such records for three years following the year that reporting was discontinued. The  
20 owner or operator ~~must~~ shall resume reporting if annual emissions in any future calendar  
21 year increase to ~~25,000~~ 10,000 metric tons CO<sub>2</sub>e per year or more.

22 (ii) If prior to the emission reduction, the facility was required to report under 20.2.300  
23 NMAC but was not required to verify emissions under 20.2.301 NMAC, then in lieu of  
24 submitting a report under this part, the owner or operator shall submit to the department a  
25 signed statement certifying that emissions were less than 10,000 metric tons CO<sub>2</sub>e during  
26 the prior year. After certifying that emissions are below 10,000 metric tons CO<sub>2</sub>e per year  
27 for three consecutive years under this paragraph, the owner or operator shall be exempted  
28 from further reporting until CO<sub>2</sub>e emissions again exceed 10,000 metric tons in any future  
29 calendar year.

30 (3) If the operations of a facility ~~or supplier~~ are changed such that all applicable GHG-  
31 emitting processes and operations listed in paragraphs (a)(1) through (a)(4) of this section

## Subpart A-General Provisions

1 cease to operate, then the owner or operator is exempt from reporting in the years following  
2 the year in which cessation of such operations occurs, provided that the owner or operator  
3 submits a notification to the ~~Administrator~~secretary that announces the cessation of reporting  
4 and certifies to the closure of all GHG emitting processes and operations. This paragraph  
5 (i)(3) does not apply to seasonal or other temporary cessation of operations. This paragraph  
6 (i)(3) does not apply to facilities with municipal solid waste landfills or industrial waste  
7 landfills, or to underground coal mines. The owner or operator must resume reporting for any  
8 future calendar year during which any of the GHG-emitting processes or operations resume  
9 operation.

10 (j) Table A-2 of this subpart provides a conversion table for some of the common units of  
11 measure used in part 98.

### 13 **§ 98.3 What are the general monitoring, reporting, recordkeeping and verification** 14 **requirements of this part?**

15 The owner or operator of a facility ~~or supplier~~ that is subject to the requirements of this part must  
16 submit GHG reports to the ~~Administrator~~department, as specified in this section.

17 (a) General. Except as provided in paragraph (d) of this section, follow the procedures for  
18 emission calculation, monitoring, quality assurance, missing data, recordkeeping, and reporting  
19 that are specified in each relevant subpart of this part.

20 (b) Schedule. The annual GHG report must be submitted no later than March 31 of each  
21 calendar year for GHG emissions in the previous calendar year. As an example, for a facility that  
22 is subject to the rule in calendar year ~~2010~~2011, the first report must be submitted on March 31,  
23 ~~2011~~2012.

24 (1) [Reserved]

25 (2) For a new facility ~~or supplier~~ that begins operation on or after January 1, ~~2010~~2011,  
26 report emissions beginning with the first operating month and ending on December 31 of that  
27 year. Each subsequent annual report must cover emissions for the calendar year, beginning on  
28 January 1 and ending on December 31.

29 (3) For any facility ~~or supplier~~ that becomes subject to this rule because of a physical or  
30 operational change that is made after January 1, ~~2010~~2011, report emissions for the first  
31 calendar year in which the change occurs, beginning with the first month of the change and

Subpart A-General Provisions

1 | ending on December 31 of that year. For a facility ~~or supplier~~ that becomes subject to this rule  
2 | solely because of an increase in hours of operation or level of production, the first month of  
3 | the change is the month in which the increased hours of operation or level of production, if  
4 | maintained for the remainder of the year, would cause the facility ~~or supplier~~ to exceed the  
5 | applicable threshold. Each subsequent annual report must cover emissions for the calendar  
6 | year, beginning on January 1 and ending on December 31.

7 | (c) Content of the annual report. Except as provided in paragraph (d) of this section, each  
8 | annual GHG report shall contain the following information:

9 | (1) Facility name ~~or supplier name (as appropriate)~~ and physical street address including  
10 | the city, state, and zip code.

11 | (2) Year and months covered by the report.

12 | (3) Date of submittal.

13 | (4) For facilities, report annual emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and each fluorinated GHG  
14 | (as defined in § 98.6) as follows:

15 | (i) Annual emissions (excluding biogenic CO<sub>2</sub>) aggregated for all GHG from all  
16 | applicable source categories in the 40 CFR 98 subparts listed in Tables A-3 and Table A-4  
17 | of this subpart Subsections B through K of 20.2.300.100 NMAC, and in 20.2.300.107  
18 | NMAC and expressed in metric tons of CO<sub>2</sub>e calculated using Equation A-1 of this  
19 | subpart.

20 | (ii) Annual emissions of biogenic CO<sub>2</sub> aggregated for all applicable source categories ~~in~~  
21 | ~~listed in Tables A-3 and Table A-4 of this subpart~~ Subsections B through K of  
22 | 20.2.300.100 NMAC, and in 20.2.300.107 NMAC.

23 | (iii) Annual emissions from each applicable source category listed in ~~Tables A-3 and~~  
24 | ~~Table A-4 of this subpart~~ Subsections B through K of 20.2.300.100 NMAC, and in  
25 | 20.2.300.107 NMAC, expressed in metric tons of each GHG listed in paragraphs

26 | (c)(4)(iii)(A) through (c)(4)(iii)(E) of this section.

27 | (A) Biogenic CO<sub>2</sub>.

28 | (B) CO<sub>2</sub> (excluding biogenic CO<sub>2</sub>).

29 | (C) CH<sub>4</sub>.

30 | (D) N<sub>2</sub>O.

31 | (E) Each fluorinated GHG (including those not listed in Table A-1 of this subpart).

Subpart A-General Provisions

1 (iv) Emissions and other data for individual units, processes, activities, and operations  
2 as specified in the “Data reporting requirements” section of each applicable subpart of  
3 this part.

4 (v) Indicate (yes or no) whether reported emissions include emissions from a  
5 cogeneration unit located at the facility.

6 (5) ~~For suppliers, report annual quantities of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and each fluorinated GHG~~  
7 ~~(as defined in § 98.6) that would be emitted from combustion or use of the products supplied,~~  
8 ~~imported, and exported during the year. Calculate and report quantities at the following levels:~~

9 (i) ~~Total quantity of GHG aggregated for all GHG from all applicable supply categories in~~  
10 ~~subparts KK through PP of this part and expressed in metric tons of CO<sub>2</sub>e calculated using~~  
11 ~~Equation A-1 of this subpart.~~

12 (ii) ~~Quantity of each GHG from each applicable supply category in subparts KK through~~  
13 ~~PP of this part, expressed in metric tons of each GHG. For fluorinated GHG, report emissions~~  
14 ~~of all fluorinated GHG, including those not listed in Table A-1 of this subpart.~~

15 (iii) ~~Any other data specified in the “Data reporting requirements” section of each~~  
16 ~~applicable subpart of this part.~~

17 (6) A written explanation, as required under § 98.3(e), if you change emission calculation  
18 methodologies during the reporting period.

19 (7) A brief description of each “best available monitoring method” used according to  
20 paragraph (d) of this section, the parameter measured using the method, and the time period  
21 during which the “best available monitoring method” was used, if applicable.

22 (8) Each data element for which a missing data procedure was used according to the  
23 procedures of an applicable subpart and the total number of hours in the year that a missing  
24 data procedure was used for each data element.

25 (9) ~~A signed and dated certification statement provided by the designated representative of~~  
26 ~~the owner or operator, according to the requirements of § 98.4(e)(1).~~

27 (i) For facilities required to report to EPA under 40 CFR 98, the certification statement  
28 shall be signed and provided by the designated representative of the owner or operator,  
29 who shall be the same individual recognized as the designated representative or alternate  
30 designated representative by EPA. The certification statement submitted to the the  
31 department shall follow the requirements of 40 CFR 98.4(e)(1).

Subpart A-General Provisions

1            (ii) For facilities not required to report to EPA under 40 CFR 98, the certification  
2            statement shall be signed by the owner, operator or authorized representative and shall  
3            certify, to the best of his or her knowledge, the truth of all information in the report.

4            (10) *NAICS code(s) that apply to the reporting entity.*

5            (i) *Primary NAICS code.* Report the NAICS code that most accurately describes the  
6            reporting entity's primary product/activity/service. The primary product/activity/service is  
7            the principal source of revenue for the reporting entity. A reporting entity that has two  
8            distinct products/activities/services providing comparable revenue may report a second  
9            primary NAICS code.

10           (ii) *Additional NAICS code(s).* Report all additional NAICS codes that describe all  
11           product(s)/activity(s)/service(s) at the reporting entity that are not related to the principal  
12           source of revenue.

13           (11) Legal name(s) and physical address(es) of the highest-level United States parent  
14           company(s) of the reporting entity and the percentage of ownership interest for each listed  
15           parent company as of December 31 of the year for which data are being reported according to  
16           the following instructions:

17           (i) If the reporting entity is entirely owned by a single United States company that is not  
18           owned by another company, provide that company's legal name and physical address as  
19           the United States parent company and report 100 percent ownership.

20           (ii) If the reporting entity is entirely owned by a single United States company that is,  
21           itself, owned by another company (e.g., it is a division or subsidiary of a higher-level  
22           company), provide the legal name and physical address of the highest-level company in the  
23           ownership hierarchy as the United States parent company and report 100 percent  
24           ownership.

25           (iii) If the reporting entity is owned by more than one United States company (e.g.,  
26           company A owns 40 percent, company B owns 35 percent, and company C owns 25  
27           percent), provide the legal names and physical addresses of all the highest-level companies  
28           with an ownership interest as the United States parent companies, and report the percent  
29           ownership of each company.

30           (iv) If the reporting entity is owned by a joint venture or a cooperative, the joint venture  
31           or cooperative is its own United States parent company. Provide the legal name and

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1 physical address of the joint venture or cooperative as the United States parent company,  
2 and report 100 percent ownership by the joint venture or cooperative.

3 (v) If the reporting entity is entirely owned by a foreign company, provide the legal  
4 name and physical address of the foreign company's highest-level company based in the  
5 United States as the United States parent company, and report 100 percent ownership.

6 (vi) If the reporting entity is partially owned by a foreign company and partially owned  
7 by one or more U.S. companies, provide the legal name and physical address of the foreign  
8 company's highest-level company based in the United States, along with the legal names  
9 and physical addresses of the other U.S. parent companies, and report the percent ownership  
10 of each of these companies.

11 (vii) If the reporting entity is a federally owned facility, report "U.S. Government" and  
12 and do not report physical address or percent ownership.

13 ~~(d) Special provisions for reporting year 2010.~~

14 ~~(1) Best available monitoring methods. During January 1, 2010 through March 31, 2010,~~  
15 ~~owners or operators may use best available monitoring methods for any parameter (e.g., fuel~~  
16 ~~use, daily carbon content of feedstock by process line) that cannot reasonably be measured~~  
17 ~~according to the monitoring and QA/QC requirements of a relevant subpart. The owner or~~  
18 ~~operator must use the calculation methodologies and equations in the "Calculating GHG~~  
19 ~~Emissions" sections of each relevant subpart, but may use the best available monitoring~~  
20 ~~method for any parameter for which it is not reasonably feasible to acquire, install, and~~  
21 ~~operate a required piece of monitoring equipment by January 1, 2010. Starting no later than~~  
22 ~~April 1, 2010, the owner or operator must discontinue using best available methods and begin~~  
23 ~~following all applicable monitoring and QA/QC requirements of this part, except as provided~~  
24 ~~in paragraphs (d)(2) and (d)(3) of this section. Best available monitoring methods means any~~  
25 ~~of the following methods specified in this paragraph:~~

26 ~~(i) Monitoring methods currently used by the facility that do not meet the specifications~~  
27 ~~of an relevant subpart.~~

28 ~~(ii) Supplier data.~~

29 ~~(iii) Engineering calculations.~~

30 ~~(iv) Other company records.~~

## Subpart A-General Provisions

1       ~~(2) Requests for extension of the use of best available monitoring methods. The owner or~~  
2 ~~operator may submit a request to the Administrator to use one or more best available~~  
3 ~~monitoring methods beyond March 31, 2010.~~

4           ~~(i) Timing of request. The extension request must be submitted to EPA no later than 30~~  
5 ~~days after the effective date of the GHG reporting rule.~~

6           ~~(ii) Content of request. Requests must contain the following information:~~

7               ~~(A) A list of specific item of monitoring instrumentation for which the request is~~  
8 ~~being made and the locations where each piece of monitoring instrumentation will be~~  
9 ~~installed.~~

10              ~~(B) Identification of the specific rule requirements (by rule subpart, section, and~~  
11 ~~paragraph numbers) for which the instrumentation is needed.~~

12              ~~(C) A description of the reasons why the needed equipment could not be obtained~~  
13 ~~and installed before April 1, 2010.~~

14              ~~(D) If the reason for the extension is that the equipment cannot be purchased and~~  
15 ~~delivered by April 1, 2010, include supporting documentation such as the date the~~  
16 ~~monitoring equipment was ordered, investigation of alternative suppliers and the dates~~  
17 ~~by which alternative vendors promised delivery, backorder notices or unexpected~~  
18 ~~delays, descriptions of actions taken to expedite delivery, and the current expected date~~  
19 ~~of delivery.~~

20              ~~(E) If the reason for the extension is that the equipment cannot be installed without a~~  
21 ~~process unit shutdown, include supporting documentation demonstrating that it is not~~  
22 ~~practicable to isolate the equipment and install the monitoring instrument without a full~~  
23 ~~process unit shutdown. Include the date of the most recent process unit shutdown, the~~  
24 ~~frequency of shutdowns for this process unit, and the date of the next planned shutdown~~  
25 ~~during which the monitoring equipment can be installed. If there has been a shutdown~~  
26 ~~or if there is a planned process unit shutdown between promulgation of this part and~~  
27 ~~April 1, 2010, include a justification of why the equipment could not be obtained and~~  
28 ~~installed during that shutdown.~~

29              ~~(F) A description of the specific actions the facility will take to obtain and install the~~  
30 ~~equipment as soon as reasonably feasible and the expected date by which the equipment~~  
31 ~~will be installed and operating.~~

Subpart A-General Provisions

1           ~~(iii) Approval criteria. To obtain approval, the owner or operator must demonstrate to~~  
2           ~~the Administrator's satisfaction that it is not reasonably feasible to acquire, install, and~~  
3           ~~operate a required piece of monitoring equipment by April 1, 2010. The use of best~~  
4           ~~available methods will not be approved beyond December 31, 2010.~~

5           ~~(3) Abbreviated emissions report for facilities containing only general stationary fuel~~  
6           ~~combustion sources. In lieu of the report required by paragraph (c) of this section, the owner~~  
7           ~~or operator of an existing facility that is in operation on January 1, 2010 and that meets the~~  
8           ~~conditions of § 98.2 (a)(3) may submit an abbreviated GHG report for the facility for GHGs~~  
9           ~~emitted in 2010. The abbreviated report must be submitted by March 31, 2011. An owner or~~  
10           ~~operator that submits an abbreviated report must submit a full GHG report according to the~~  
11           ~~requirements of paragraph (c) of this section beginning in calendar year 2011. The~~  
12           ~~abbreviated facility report must include the following information:~~

13           ~~(i) Facility name and physical street address including the city, state and zip code.~~

14           ~~(ii) The year and months covered by the report.~~

15           ~~(iii) Date of submittal.~~

16           ~~(iv) Total facility GHG emissions aggregated for all stationary fuel combustion units~~  
17           ~~calculated according to any method specified in § 98.33(a) and expressed in metric tons of~~  
18           ~~CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and CO<sub>2</sub>e.~~

19           ~~(v) Any facility operating data or process information used for the GHG emission~~  
20           ~~calculations.~~

21           ~~(vi) A signed and dated certification statement provided by the designated~~  
22           ~~representative of the owner or operator, according to the requirements of paragraph (c)(1)~~  
23           ~~of this section.~~

24           ~~(d) Abbreviated emissions report for facilities containing only general stationary fuel~~  
25           ~~combustion sources and emitting less than 25,000 metric tons CO<sub>2</sub>e per year, exclusive of~~  
26           ~~reporting-only emissions.~~

27           ~~(1) An owner or operator that is otherwise subject to the requirements of this part may~~  
28           ~~submit an abbreviated emissions report in lieu of the report required by 40 CFR 98.3(c) if all of~~  
29           ~~the following apply:~~

30           ~~(a) total emissions exclusive of reporting-only emissions are less than 25,000 metric~~  
31           ~~tons CO<sub>2</sub>e;~~

Subpart A-General Provisions

1 (b) no emissions are required to be reported by this part other than those required to  
2 be reported by 40 CFR 98 Subpart C-General Stationary Fuel Combustion, as incorporated in  
3 this part with modifications in 20.2.300.103 NMAC, including CO2 from combustion of  
4 biomass-derived fuels;

5 (c) the facility is not required to report greenhouse gas emissions to the US EPA  
6 under 40 CFR 98; and

7 (d) the facility emissions report is not subject to verification requirements under  
8 20.2.301 NMAC

9 (2). The abbreviated report shall contain the following information:

10 (a) facility, operating or construction permit number or notice of intent number, and  
11 physical street address including the city, state and zip code, or geographical location if not at a  
12 street address;

13 (b) the year and months covered by the report;

14 (c) date of submittal;

15 (d) total facility GHG emissions aggregated for all stationary fuel combustion units  
16 calculated according to any method specified in 40 CFR 98.33(a) and expressed in metric tons of  
17 total CO2, CO2 from biomass fuels, CH4, N2O, and CO2e;

18 (e) identification of the methods used to determine emissions;

19 (f) any facility operating data or process information used for the GHG emission  
20 calculations;

21 (g) a signed and dated certification statement provided by the designated  
22 representative of the owner or operator, according to the requirements of paragraph 98.3(c)(9) as  
23 modified in 20.2.300.102 NMAC; and

24 (h) for facilities with on-site electricity generation or cogeneration, the information  
25 specified in Paragraphs 1 and 2 of Subsection D of 20.2.300.103 NMAC.

26 (e) Emission calculations. In preparing the GHG report, you must use the calculation  
27 methodologies specified in the relevant subparts, except as specified in paragraph (d) of this  
28 section. For each source category, you must use the same calculation methodology throughout a  
29 reporting period unless you provide a written explanation of why a change in methodology was  
30 required.

Subpart A-General Provisions

1 (f) Verification. Owner or operators subject to the verification requirements of 20.2.301  
2 NMAC shall obtain verification services and submit a verification statement meeting the  
3 requirements of 20.2.301 NMAC, if applicable. ~~To verify the completeness and accuracy of~~  
4 ~~reported GHG emissions, the Administrator may review the certification statements described in~~  
5 ~~paragraphs (c)(8) and (d)(3)(vi) of this section and any other credible evidence, in conjunction~~  
6 ~~with a comprehensive review of the GHG reports and periodic audits of selected reporting~~  
7 ~~facilities. Nothing in this section prohibits the Administrator from using additional information~~  
8 ~~to verify the completeness and accuracy of the reports.~~

9 (g) Recordkeeping. An owner or operator that is required to report GHGs under this part must  
10 keep records as specified in this paragraph. Retain all required records for at least ~~3~~7 years. The  
11 records shall be kept in an electronic or hard-copy format (as appropriate) and recorded in a form  
12 that is suitable for expeditious inspection and review. Upon request by the  
13 ~~Administrator~~secretary, the records required under this section must be made available to ~~EPA~~  
14 the department within 20 days after the request. Records may be retained off site if the records  
15 are readily available for expeditious inspection and review. For records that are electronically  
16 generated or maintained, the equipment or software necessary to read the records shall be made  
17 available, or, if requested by ~~EPA~~the department, electronic records shall be converted to paper  
18 documents. You must retain the following records, in addition to those records prescribed in each  
19 applicable subpart of this part:

20 (1) A list of all units, operations, processes, and activities for which GHG emission were  
21 calculated.

22 (2) The data used to calculate the GHG emissions for each unit, operation, process, and  
23 activity, categorized by fuel or material type. These data include but are not limited to the  
24 following information in this paragraph (g)(2):

25 (i) The GHG emissions calculations and methods used.

26 (ii) Analytical results for the development of site-specific emissions factors.

27 (iii) The results of all required analyses for high heat value, carbon content, and other  
28 required fuel or feedstock parameters.

29 (iv) Any facility operating data or process information used for the GHG emission  
30 calculations.

31 (3) The annual GHG reports.

Subpart A-General Provisions

1 (4) Missing data computations. For each missing data event, also retain a record of the  
2 duration of the event, actions taken to restore malfunctioning monitoring equipment, the cause  
3 of the event, and the actions taken to prevent or minimize occurrence in the future.

4 (5) For sources subject to reporting under 40 CFR Part 98, Aa written GHG Monitoring  
5 Plan.

6 (i) At a minimum, the GHG Monitoring Plan shall include the elements listed in this  
7 paragraph (g)(5)(i).

8 (A) Identification of positions of responsibility (i.e., job titles) for collection of the  
9 emissions data.

10 (B) Explanation of the processes and methods used to collect the necessary data for  
11 the GHG calculations.

12 (C) Description of the procedures and methods that are used for quality assurance,  
13 maintenance, and repair of all continuous monitoring systems, flow meters, and other  
14 instrumentation used to provide data for the GHGs reported under this part.

15 (ii) The GHG Monitoring Plan may rely on references to existing corporate documents  
16 (e.g., standard operating procedures, quality assurance programs under appendix F to 40  
17 CFR part 60 or appendix B to 40 CFR part 75, and other documents) provided that the  
18 elements required by paragraph (g)(5)(i) of this section are easily recognizable.

19 (iii) The owner or operator shall revise the GHG Monitoring Plan as needed to reflect  
20 changes in production processes, monitoring instrumentation, and quality assurance  
21 procedures; or to improve procedures for the maintenance and repair of monitoring  
22 systems to reduce the frequency of monitoring equipment downtime.

23 (iv) Upon request by the ~~Administrator~~secretary, the owner or operator shall make all  
24 information that is collected in conformance with the GHG Monitoring Plan available for  
25 review during an audit within 20 days after the request. Electronic storage of the  
26 information in the plan is permissible, provided that the information can be made available  
27 in hard copy upon request during an audit.

28 (6) The results of all required certification and quality assurance tests of continuous  
29 monitoring systems, fuel flow meters, and other instrumentation used to provide data for the  
30 GHGs reported under this part.

Subpart A-General Provisions

1 (7) Maintenance records for all continuous monitoring systems, flow meters, and other  
2 instrumentation used to provide data for the GHGs reported under this part.

3 (h) Annual GHG report revisions.

4 (1) The owner or operator of a facility subject to reporting under both 20.2.300 NMAC and  
5 40 CFR Part 98 shall submit a revised report within 45 days of discovering or being notified  
6 by EPA of errors in an annual GHG report. The revised report must correct all identified  
7 errors. The owner or operator shall retain documentation for ~~3~~7 years to support any revisions  
8 made to an annual GHG report.

9 (2) The owner or operator of a facility subject to reporting under 20.2.300 NMAC but not  
10 40 CFR Part 98 shall submit a revised report within 30 days of finding that a report contains  
11 an error, or accumulation of errors, greater than 5 percent of the total CO<sub>2</sub>e emissions  
12 reported. To the extent possible, the revised report must correct all identified errors. A  
13 revised report will be accepted only if approved by the department. The owner or operator  
14 shall retain documentation for 7 years to support any revisions made to an annual GHG  
15 report.

16 (i) Calibration accuracy requirements. The owner or operator of a facility ~~or supplier~~ that is  
17 subject to the requirements of this part must meet the calibration accuracy requirements of this  
18 paragraph (i).

19 (1) Except as provided in paragraphs (i)(4) through (i)(6) of this section, flow meters and  
20 other devices (e.g., belt scales) that measure data used to calculate GHG emissions shall be  
21 calibrated using the procedures specified in this paragraph and each relevant subpart of this  
22 part. All measurement devices must be calibrated according to the manufacturer's  
23 recommended procedures, an appropriate industry consensus standard, or a method specified  
24 in a relevant subpart of this part. All measurement devices shall be calibrated to an accuracy  
25 of 5 percent. For facilities ~~and suppliers~~ that are subject to this part on January 1, ~~2010~~2011,  
26 the initial calibration shall be conducted by April 1, ~~2010~~2011. For facilities ~~and suppliers~~ that  
27 become subject to this part after April 1, ~~2010~~2011, the initial calibration shall be conducted  
28 by the date that data collection is required to begin. Subsequent calibrations shall be  
29 performed at the frequency specified in each applicable subpart.

30 (2) For flow meters, perform all calibrations at measurement points that are representative  
31 of normal operation of the meter. Except for the orifice, nozzle, and venturi flow meters

## Subpart A-General Provisions

1 described in paragraph (i)(3) of this section, calculate the calibration error at each  
2 measurement point using Equation A-2 of this section. The terms “R” and “A” in Equation  
3 A-2 must be expressed in consistent units of measure (e.g., gallons/minute, ft<sup>3</sup>/min). The  
4 calibration error at each measurement point shall not exceed 5.0 percent of the reference  
5 value.

$$6 \quad CE = \frac{R - A}{R} \times 100 \quad (\text{Eq. A-2})$$

8  
9 Where:

10 CE = Calibration error (%)

11 R = Reference value

12 A = Flow meter response to the reference value

13  
14 (3) For orifice, nozzle, and venturi flow meters, the initial quality assurance consists of in-  
15 situ calibration of the differential pressure (delta-P), total pressure, and temperature  
16 transmitters. Calibrate each transmitter at a zero point and at least one upscale point. Fixed  
17 reference points, such as the freezing point of water, may be used for temperature transmitter  
18 calibrations. Calculate the calibration error of each transmitter at each measurement point,  
19 using Equation A-3 of this subpart. The terms “R”, “A”, and “FS” in Equation A-3 of this  
20 subpart must be in consistent units of measure (e.g., milliamperes, inches of water, psi,  
21 degrees). For each transmitter, the CE value at each measurement point shall not exceed 2.0  
22 percent of full-scale. Alternatively, the results are acceptable if the sum of the calculated CE  
23 values for the three transmitters at each calibration level (i.e., at the zero level and at each  
24 upscale level) does not exceed 5.0 percent.

$$25 \quad CE = \frac{R - A}{FS} \times 100 \quad (\text{Eq. A-3})$$

26  
27  
28 Where:

29 CE = Calibration error (%)

Subpart A-General Provisions

1 R = Reference value

2 A = Transmitter response to the reference value

3 FS = Full-scale value of the transmitter

4  
5 (4) Fuel billing meters are exempted from the calibration requirements of this section,  
6 provided that the fuel supplier and any unit combusting the fuel do not have any common  
7 owners and are not owned by subsidiaries or affiliates of the same company.

8 (5) For a flow meter or other measurement device that has been previously calibrated in  
9 accordance with this part, an initial calibration is not required by the date specified in  
10 paragraph (i)(1) of this section if, as of the date required for the initial calibration, the  
11 previous calibration is still active (i.e., the device is not yet due for recalibration because the  
12 time interval between successive calibrations, as required by this part, has not elapsed).

13 (6) For units and processes that operate continuously with infrequent outages, it may not be  
14 possible to meet the April 1, ~~2010~~ 2011 deadline for the initial calibration of a flow meter or  
15 other measurement device without removing the device from service and shipping it to a  
16 remote location, thereby disrupting normal process operation. In such cases, the owner or  
17 operator may postpone the initial calibration until the next scheduled maintenance outage, and  
18 may similarly postpone the subsequent recalibrations. Such postponements shall be  
19 documented in the monitoring plan that is required under § 98.3(g)(5) and submitted before  
20 December 31, 2011 to the department for approval of any postponements of the initial  
21 calibration beyond that date.

22 (j). Where 20.2.300 NMAC requires sampling of a parameter on a more frequent basis than the  
23 corresponding rule in 40 CFR Part 98, the following shall apply:

24 (1) The samples must be spaced apart as evenly as possible over time, taking into account  
25 the operating schedule of the relevant unit or facility.

26 (2) The owner or operator shall calculate and report a weighted average of the values  
27 derived from the samples by using the following formula:

28

$$V_E = \frac{\sum_{j=1}^n (V_j \times M_j)}{\sum_{j=1}^n M_j}$$

Subpart A-General Provisions

1        Where:

2         $V_E$  =        The value of the parameter to be reported under 40 CFR Part 98 for period E.

3         $j$     =        Each period during period E for which a sample is required by this part.

4         $n$     =        The number of periods  $j$  in period E.

5         $V_j$  =        The value of the sample for period  $j$ .

6         $M_j$  =        The mass of the sampled material processed or otherwise used by the relevant  
7                    unit or facility in period  $j$ .

8        (3) You must keep records of the date and result for each sample and mass measurement  
9        used in the equation in subsection (2) and of the calculation of each weighted average  
10       included in your report.

11       (k) Where 20.2.300 NMAC specifies a choice between use of a fuel-based or mass balance-  
12       based calculation or use of a continuous emissions monitoring system (CEMS) to calculate GHG  
13       emissions, the operator shall make this choice and continue to use the method chosen for all  
14       future emissions data reports, unless the use of the alternative calculation method is approved in  
15       advance by the department.

16       (l) The owner or operator may elect to designate as de minimis one or more sources or  
17       pollutants that collectively emit no more than 3 percent of the facility's total CO<sub>2</sub>e emissions,  
18       but not to exceed 20,000 metric tons CO<sub>2</sub>e. Where this 20.2.300 NMAC otherwise requires the  
19       use of a more stringent method for monitoring and reporting emissions than the method required  
20       by 40 CFR Part 98, the owner or operator may elect to use any other method allowed under 40  
21       CFR Part 98 for the sources or pollutants designated as de minimis.

22       (m) Notwithstanding the missing data procedures specified in 20.2.300 NMAC, the failure to  
23       conduct monitoring in accordance with 20.2.300 NMAC shall constitute a violation.

24  
25       **§ 98.4 Authorization and responsibilities of the designated representative.**

26       ~~(a) General. Except as provided under paragraph (f) of this section, each facility, and each~~  
27       ~~supplier, that is subject to this part, shall have one and only one designated representative, who~~  
28       ~~shall be responsible for certifying, signing, and submitting GHG emissions reports and any other~~  
29       ~~submissions for such facility and supplier respectively to the Administrator under this part. If the~~  
30       ~~facility is required under any other part of title 40 of the Code of Federal Regulations to submit~~  
31       ~~to the Administrator any other emission report that is subject to any requirement in 40 CFR part~~

Subpart A-General Provisions

1 ~~75, the same individual shall be the designated representative responsible for certifying, signing,~~  
2 ~~and submitting the GHG emissions reports and all such other emissions reports under this part.~~

3 (b) ~~Authorization of a designated representative. The designated representative of the facility~~  
4 ~~or supplier shall be an individual selected by an agreement binding on the owners and operators~~  
5 ~~of such facility or supplier and shall act in accordance with the certification statement in~~  
6 ~~paragraph (i)(4)(iv) of this section.~~

7 (c) ~~Responsibility of the designated representative. Upon receipt by the Administrator of a~~  
8 ~~complete certificate of representation under this section for a facility or supplier, the designated~~  
9 ~~representative identified in such certificate of representation shall represent and, by his or her~~  
10 ~~representations, actions, inactions, or submissions, legally bind each owner and operator of such~~  
11 ~~facility or supplier in all matters pertaining to this part, notwithstanding any agreement between~~  
12 ~~the designated representative and such owners and operators. The owners and operators shall be~~  
13 ~~bound by any decision or order issued to the designated representative by the Administrator or a~~  
14 ~~court.~~

15 (d) ~~Timing. No GHG emissions report or other submissions under this part for a facility or~~  
16 ~~supplier will be accepted until the Administrator has received a complete certificate of~~  
17 ~~representation under this section for a designated representative of the facility or supplier. Such~~  
18 ~~certificate of representation shall be submitted at least 60 days before the deadline for submission~~  
19 ~~of the facility's or supplier's initial emission report under this part.~~

20 (e) ~~Certification of the GHG emissions report. Each GHG emission report and any other~~  
21 ~~submission under this part for a facility or supplier shall be certified, signed, and submitted by~~  
22 ~~the designated representative or any alternate designated representative of the facility or supplier~~  
23 ~~in accordance with this section and § 3.10 of this chapter.~~

24 (1) ~~Each such submission shall include the following certification statement signed by the~~  
25 ~~designated representative or any alternate designated representative: "I am authorized to~~  
26 ~~make this submission on behalf of the owners and operators of the facility or supplier, as~~  
27 ~~applicable, for which the submission is made. I certify under penalty of law that I have~~  
28 ~~personally examined, and am familiar with, the statements and information submitted in this~~  
29 ~~document and all its attachments. Based on my inquiry of those individuals with primary~~  
30 ~~responsibility for obtaining the information, I certify that the statements and information are~~  
31 ~~to the best of my knowledge and belief true, accurate, and complete. I am aware that there are~~

## Subpart A-General Provisions

1 significant penalties for submitting false statements and information or omitting required  
2 statements and information, including the possibility of fine or imprisonment.”

3 (2) The Administrator will accept a GHG emission report or other submission for a facility  
4 or supplier under this part only if the submission is certified, signed, and submitted in  
5 accordance with this section.

6 (f) ~~Alternate designated representative. A certificate of representation under this section for a~~  
7 ~~facility or supplier may designate one alternate designated representative, who shall be an~~  
8 ~~individual selected by an agreement binding on the owners and operators, and may act on behalf~~  
9 ~~of the designated representative, of such facility or supplier. The agreement by which the~~  
10 ~~alternate designated representative is selected shall include a procedure for authorizing the~~  
11 ~~alternate designated representative to act in lieu of the designated representative.~~

12 (1) ~~Upon receipt by the Administrator of a complete certificate of representation under this~~  
13 ~~section for a facility or supplier identifying an alternate designated representative.~~

14 (i) ~~The alternate designated representative may act on behalf of the designated~~  
15 ~~representative for such facility or supplier.~~

16 (ii) ~~Any representation, action, inaction, or submission by the alternate designated~~  
17 ~~representative shall be deemed to be a representation, action, inaction, or submission by the~~  
18 ~~designated representative.~~

19 (2) ~~Except in this section, whenever the term “designated representative” is used in this~~  
20 ~~part, the term shall be construed to include the designated representative or any alternate~~  
21 ~~designated representative.~~

22 (g) ~~Changing a designated representative or alternate designated representative. The~~  
23 ~~designated representative or alternate designated representative identified in a complete~~  
24 ~~certificate of representation under this section for a facility or supplier received by the~~  
25 ~~Administrator may be changed at any time upon receipt by the Administrator of another later~~  
26 ~~signed, complete certificate of representation under this section for the facility or supplier.~~  
27 ~~Notwithstanding any such change, all representations, actions, inactions, and submissions by the~~  
28 ~~previous designated representative or the previous alternate designated representative of the~~  
29 ~~facility or supplier before the time and date when the Administrator receives such later signed~~  
30 ~~certificate of representation shall be binding on the new designated representative and the owners~~  
31 ~~and operators of the facility or supplier.~~

Subpart A-General Provisions

1       ~~(h) Changes in owners and operators. In the event an owner or operator of the facility or~~  
2 ~~supplier is not included in the list of owners and operators in the certificate of representation~~  
3 ~~under this section for the facility or supplier, such owner or operator shall be deemed to be~~  
4 ~~subject to and bound by the certificate of representation, the representations, actions, inactions,~~  
5 ~~and submissions of the designated representative and any alternate designated representative of~~  
6 ~~the facility or supplier, as if the owner or operator were included in such list. Within 90 days~~  
7 ~~after any change in the owners and operators of the facility or supplier (including the addition of~~  
8 ~~a new owner or operator), the designated representative or any alternate designated~~  
9 ~~representative shall submit a certificate of representation that is complete under this section~~  
10 ~~except that such list shall be amended to reflect the change. If the designated representative or~~  
11 ~~alternate designated representative determines at any time that an owner or operator of the~~  
12 ~~facility or supplier is not included in such list and such exclusion is not the result of a change in~~  
13 ~~the owners and operators, the designated representative or any alternate designated representative~~  
14 ~~shall submit, within 90 days of making such determination, a certificate of representation that is~~  
15 ~~complete under this section except that such list shall be amended to include such owner or~~  
16 ~~operator.~~

17       ~~(i) Certificate of representation. A certificate of representation shall be complete if it includes~~  
18 ~~the following elements in a format prescribed by the Administrator in accordance with this~~  
19 ~~section:~~

20           ~~(1) Identification of the facility or supplier for which the certificate of representation is~~  
21 ~~submitted.~~

22           ~~(2) The name, address, e-mail address (if any), telephone number, and facsimile~~  
23 ~~transmission number (if any) of the designated representative and any alternate designated~~  
24 ~~representative.~~

25           ~~(3) A list of the owners and operators of the facility or supplier identified in paragraph~~  
26 ~~(i)(1) of this section, provided that, if the list includes the operators of the facility or supplier~~  
27 ~~and the owners with control of the facility or supplier, the failure to include any other owners~~  
28 ~~shall not make the certificate of representation incomplete.~~

29           ~~(4) The following certification statements by the designated representative and any~~  
30 ~~alternate designated representative:~~

Subpart A-General Provisions

1           (i) ~~“I certify that I was selected as the designated representative or alternate designated~~  
2 ~~representative, as applicable, by an agreement binding on the owners and operators of the~~  
3 ~~facility or supplier, as applicable.”~~

4           (ii) ~~“I certify that I have all the necessary authority to carry out my duties and~~  
5 ~~responsibilities under 40 CFR part 98 on behalf of the owners and operators of the facility~~  
6 ~~or supplier, as applicable, and that each such owner and operator shall be fully bound by~~  
7 ~~my representations, actions, inactions, or submissions.”~~

8           (iii) ~~“I certify that the owners and operators of the facility or supplier, as applicable,~~  
9 ~~shall be bound by any order issued to me by the Administrator or a court regarding the~~  
10 ~~facility or supplier.”~~

11           (iv) ~~“If there are multiple owners and operators of the facility or supplier, as applicable,~~  
12 ~~I certify that I have given a written notice of my selection as the ‘designated~~  
13 ~~representative’ or ‘alternate designated representative’, as applicable, and of the agreement~~  
14 ~~by which I was selected to each owner and operator of the facility or supplier.”~~

15           (5) ~~The signature of the designated representative and any alternate designated~~  
16 ~~representative and the dates signed.~~

17           (j) ~~Documents of agreement. Unless otherwise required by the Administrator, documents of~~  
18 ~~agreement referred to in the certificate of representation shall not be submitted to the~~  
19 ~~Administrator. The Administrator shall not be under any obligation to review or evaluate the~~  
20 ~~sufficiency of such documents, if submitted.~~

21           (k) ~~Binding nature of the certificate of representation. Once a complete certificate of~~  
22 ~~representation under this section for a facility or supplier has been received, the Administrator~~  
23 ~~will rely on the certificate of representation unless and until a later signed, complete certificate of~~  
24 ~~representation under this section for the facility or supplier is received by the Administrator.~~

25           (l) ~~Objections Concerning a Designated Representative~~

26           (1) ~~Except as provided in paragraph (g) of this section, no objection or other~~  
27 ~~communication submitted to the Administrator concerning the authorization, or any~~  
28 ~~representation, action, inaction, or submission, of the designated representative or alternate~~  
29 ~~designated representative shall affect any representation, action, inaction, or submission of the~~  
30 ~~designated representative or alternate designated representative, or the finality of any decision~~  
31 ~~or order by the Administrator under this part.~~

Subpart A-General Provisions

1       ~~(2) The Administrator will not adjudicate any private legal dispute concerning the~~  
2       ~~authorization or any representation, action, inaction, or submission of any designated~~  
3       ~~representative or alternate designated representative.~~

4       ~~(m) Delegation by designated representative and alternate designated representative.~~

5       ~~(1) A designated representative or an alternate designated representative may delegate his~~  
6       ~~or her own authority, to one or more individuals, to submit an electronic submission to the~~  
7       ~~Administrator provided for or required under this part, except for a submission under this~~  
8       ~~paragraph.~~

9       ~~(2) In order to delegate his or her own authority, to one or more individuals, to submit an~~  
10       ~~electronic submission to the Administrator in accordance with paragraph (m)(1) of this~~  
11       ~~section, the designated representative or alternate designated representative must submit~~  
12       ~~electronically to the Administrator a notice of delegation, in a format prescribed by the~~  
13       ~~Administrator, that includes the following elements:~~

14           ~~(i) The name, address, e-mail address (if any), telephone number, and facsimile~~  
15           ~~transmission number (if any) of such designated representative or alternate designated~~  
16           ~~representative.~~

17           ~~(ii) The name, address, e-mail address, telephone number, and facsimile transmission~~  
18           ~~number (if any) of each such individual (referred to as an “agent”).~~

19           ~~(iii) For each such individual, a list of the type or types of electronic submissions under~~  
20           ~~paragraph (m)(1) of this section for which authority is delegated to him or her.~~

21           ~~(iv) For each type of electronic submission listed in accordance with paragraph~~  
22           ~~(m)(2)(iii) of this section, the facility or supplier for which the electronic submission may~~  
23           ~~be made.~~

24           ~~(v) The following certification statements by such designated representative or alternate~~  
25           ~~designated representative:~~

26           ~~(A) “I agree that any electronic submission to the Administrator that is by an agent~~  
27           ~~identified in this notice of delegation and of a type listed, and for a facility or supplier~~  
28           ~~designated, for such agent in this notice of delegation and that is made when I am a~~  
29           ~~designated representative or alternate designated representative, as applicable, and~~  
30           ~~before this notice of delegation is superseded by another notice of delegation under §~~

Subpart A-General Provisions

1 ~~98.4(m)(3) shall be deemed to be an electronic submission certified, signed, and~~  
2 ~~submitted by me.’’~~

3 ~~(B) ‘‘Until this notice of delegation is superseded by a later signed notice of~~  
4 ~~delegation under § 98.4(m)(3), I agree to maintain an e-mail account and to notify the~~  
5 ~~Administrator immediately of any change in my e-mail address unless all delegation of~~  
6 ~~authority by me under § 98.4(m) is terminated.’’~~

7 ~~(vi) The signature of such designated representative or alternate designated~~  
8 ~~representative and the date signed.~~

9 ~~(3) A notice of delegation submitted in accordance with paragraph (m)(2) of this section~~  
10 ~~shall be effective, with regard to the designated representative or alternate designated~~  
11 ~~representative identified in such notice, upon receipt of such notice by the Administrator and~~  
12 ~~until receipt by the Administrator of another such notice that was signed later by such~~  
13 ~~designated representative or alternate designated representative, as applicable. The later~~  
14 ~~signed notice of delegation may replace any previously identified agent, add a new agent, or~~  
15 ~~eliminate entirely any delegation of authority.~~

16 ~~(4) Any electronic submission covered by the certification in paragraph (m)(2)(iv)(A) of~~  
17 ~~this section and made in accordance with a notice of delegation effective under paragraph~~  
18 ~~(m)(3) of this section shall be deemed to be an electronic submission certified, signed, and~~  
19 ~~submitted by the designated representative or alternate designated representative submitting~~  
20 ~~such notice of delegation.~~

21  
22 **§ 98.5 How is the report submitted?**

23 Each GHG report and certificate of representation for a facility or supplier must be submitted  
24 electronically in accordance with the requirements of § 98.4 and in a format specified by the  
25 Administrator secretary.

26  
27 **98.6 Definitions.**

28 [Additional definitions are added in 20.2.300.7 NMAC.]

29 All terms used in this part shall have the same meaning given in the Clean Air Act and in this  
30 section.

## Subpart A-General Provisions

1        *Accuracy* of a measurement at a specified level (e.g., one percent of full scale or one percent  
2 of the value measured) means that the mean of repeat measurements made by a device or  
3 technique are within 95 percent of the range bounded by the true value plus or minus the  
4 specified level.

5        *Acid Rain Program* means the program established under title IV of the Clean Air Act, and  
6 implemented under parts 72 through 78 of this chapter for the reduction of sulfur dioxide and  
7 nitrogen oxides emissions.

8        ~~*Administrator* means the Administrator of the United States Environmental Protection~~  
9 ~~*Agency* or the Administrator's authorized representative~~ the secretary of the New Mexico  
10 environment department or his or her designee.

11        *AGA* means the American Gas Association

12        *Alkali bypass* means a duct between the feed end of the kiln and the preheater tower through  
13 which a portion of the kiln exit gas stream is withdrawn and quickly cooled by air or water to  
14 avoid excessive buildup of alkali, chloride and/or sulfur on the raw feed. This may also be  
15 referred to as the "kiln exhaust gas bypass."

16        *Anaerobic digester* means the system where wastes are collected and anaerobically digested  
17 in large containment vessels or covered lagoons. Anaerobic digesters stabilize waste by the  
18 microbial reduction of complex organic compounds to CO<sub>2</sub> and CH<sub>4</sub>, which is captured and may  
19 be flared or used as fuel. Anaerobic digestion systems, include but are not limited to covered  
20 lagoon, complete mix, plug flow, and fixed film digesters.

21        *Anaerobic lagoon* means a type of liquid storage system component, either at manure  
22 management system or a wastewater treatment system, that is designed and operated to stabilize  
23 wastes using anaerobic microbial processes. Anaerobic lagoons may be designed for combined  
24 stabilization and storage with varying lengths of retention time (up to a year or greater),  
25 depending on the climate region, the volatile solids loading rate, and other operational factors.

26        *Anode effect* is a process upset condition of an aluminum electrolysis cell caused by too little  
27 alumina dissolved in the electrolyte. The anode effect begins when the voltage rises rapidly and  
28 exceeds a threshold voltage, typically 8 volts.

29        *Anode Effect Minutes Per Cell Day (24 hours)* are the total minutes during which an  
30 electrolysis cell voltage is above the threshold voltage, typically 8 volts.

31        *ANSI* means the American National Standards Institute.

## Subpart A-General Provisions

1        *API* means the American Petroleum Institute.

2        *ASABE* means the American Society of Agricultural and Biological Engineers.

3        *ASME* means the American Society of Mechanical Engineers.

4        *ASTM* means the American Society of Testing and Materials.

5        *Asphalt* means a dark brown-to-black cement-like material obtained by petroleum processing  
6 and containing bitumens as the predominant component. It includes crude asphalt as well as the  
7 following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of  
8 water), and petroleum distillates blended with asphalt to make cutback asphalts.

9        *Aviation Gasoline* means a complex mixture of volatile hydrocarbons, with or without  
10 additives, suitably blended to be used in aviation reciprocating engines. Specifications can be  
11 found in ASTM Specification D910–07a, Standard Specification for Aviation Gasolines  
12 (incorporated by reference, see §98.7).

13         $B_0$  means the maximum CH<sub>4</sub> producing capacity of a waste stream, kg CH<sub>4</sub>/kg COD.

14        *Basic oxygen furnace* means any refractory-lined vessel in which high-purity oxygen is blown  
15 under pressure through a bath of molten iron, scrap metal, and fluxes to produce steel.

16        bbl means barrel.

17        *Biodiesel* means a mono-alkyl ester derived from biomass and conforming to ASTM D6751-  
18 08, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels.

19        *Biogenic CO<sub>2</sub>* means carbon dioxide emissions generated as the result of biomass combustion  
20 from combustion units for which emission calculations are required by an applicable part 98  
21 subpart.

22        *Biomass* means non-fossilized and biodegradable organic material originating from plants,  
23 animals or micro-organisms, including products, by-products, residues and waste from  
24 agriculture, forestry and related industries as well as the non-fossilized and biodegradable  
25 organic fractions of industrial and municipal wastes, including gases and liquids recovered from  
26 the decomposition of non-fossilized and biodegradable organic material.

27        *Blast furnace* means a furnace that is located at an integrated iron and steel plant and is used  
28 for the production of molten iron from iron ore pellets and other iron bearing materials.

29        *Blendstocks* are petroleum products used for blending or compounding into finished motor  
30 gasoline. These include RBOB (reformulated blendstock for oxygenate blending) and CBOB

Subpart A-General Provisions

1 (conventional blendstock for oxygenate blending), but exclude oxygenates, butane, and pentanes  
2 plus.

3 *Blendstocks -- Others* are products used for blending or compounding into finished motor  
4 gasoline that are not defined elsewhere. Excludes Gasoline Treated as Blendstock (GTAB),  
5 Diesel Treated as Blendstock (DTAB), conventional blendstock for oxygenate blending (CBOB),  
6 reformulated blendstock for oxygenate blending (RBOB), oxygenates (e.g. fuel ethanol and  
7 methyl tertiary butyl ether), butane, and pentanes plus.

8 *Blowdown* mean the act of emptying or depressuring a vessel. This may also refer to the  
9 discarded material such as blowdown water from a boiler or cooling tower.

10 *British Thermal Unit or Btu* means the quantity of heat required to raise the temperature of  
11 one pound of water by one degree Fahrenheit at about 39.2 degrees Fahrenheit.

12 *Bulk*, with respect to industrial GHG suppliers and CO<sub>2</sub> suppliers, means the transfer of a  
13 product inside containers, including but not limited to tanks, cylinders, drums, and pressure  
14 vessels.

15 *Bulk natural gas liquid or NGL* refers to mixtures of hydrocarbons that have been separated  
16 from natural gas as liquids through the process of absorption, condensation, adsorption, or other  
17 methods at lease separators and field facilities. Generally, such liquids consist of ethane,  
18 propane, butanes, and pentanes plus. Bulk NGL is sold to fractionators or to refineries and  
19 petrochemical plants where the fractionation takes place.

20 *Butane*, or n-Butane, is a paraffinic straight-chain hydrocarbon with molecular formula  
21 C<sub>4</sub>H<sub>10</sub>.

22 *Butylene*, or n-Butylene, is an olefinic straight-chain hydrocarbon with molecular formula  
23 C<sub>4</sub>H<sub>8</sub>.

24 *By-product coke oven battery* means a group of ovens connected by common walls, where  
25 coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas  
26 from which by-products are recovered.

27 *Calcination* means the process of thermally treating minerals to decompose carbonates from  
28 ore.

29 *Calculation methodology* means a methodology prescribed under the section “Calculating  
30 GHG Emissions” in any subpart of part 98.

## Subpart A-General Provisions

1        *Carbon dioxide equivalent or CO<sub>2</sub>e* means the number of metric tons of CO<sub>2</sub> emissions with  
2 the same global warming potential as one metric ton of another greenhouse gas, and is calculated  
3 using Equation A-1 of this subpart.

4        *Carbon dioxide production well* means any hole drilled in the earth for the primary purpose of  
5 extracting carbon dioxide from a geologic formation or group of formations which contain  
6 deposits of carbon dioxide.

7        *Carbon dioxide production well facility* means one or more carbon dioxide production wells  
8 that are located on one or more contiguous or adjacent properties, which are under the control of  
9 the same entity. Carbon dioxide production wells located on different oil and gas leases, mineral  
10 fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or  
11 separate surface sites, whether or not connected by a road, waterway, power line, or pipeline,  
12 shall be considered part of the same CO<sub>2</sub> production well facility if they otherwise meet the  
13 definition.

14        *Carbon dioxide stream* means carbon dioxide that has been captured from an emission source  
15 (e.g. a power plant or other industrial facility) or extracted from a carbon dioxide production well  
16 plus incidental associated substances either derived from the source materials and the capture  
17 process or extracted with the carbon dioxide.

18        *Carbon share* means the percent of total mass that carbon represents in any product.

19        *Carbonate* means compounds containing the radical CO<sub>3</sub><sup>-2</sup>. Upon calcination, the carbonate  
20 radical decomposes to evolve carbon dioxide (CO<sub>2</sub>). Common carbonates consumed in the  
21 mineral industry include calcium carbonate (CaCO<sub>3</sub>) or calcite; magnesium carbonate (MgCO<sub>3</sub>)  
22 or magnesite; and calcium-magnesium carbonate (CaMg(CO<sub>3</sub>)<sub>2</sub>) or dolomite.

23        *Carbonate-based mineral* means any of the following minerals used in the manufacture of  
24 glass: calcium carbonate (CaCO<sub>3</sub>), calcium magnesium carbonate (CaMg(CO<sub>3</sub>)<sub>2</sub>), sodium  
25 carbonate (Na<sub>2</sub>CO<sub>3</sub>), barium carbonate (BaCO<sub>3</sub>), potassium carbonate (K<sub>2</sub>CO<sub>3</sub>), lithium  
26 carbonate (Li<sub>2</sub>CO<sub>3</sub>), and strontium carbonate (SrCO<sub>3</sub>).

27        *Carbonate-based mineral mass fraction* means the following: for limestone, the mass fraction  
28 of CaCO<sub>3</sub> in the limestone; for dolomite, the mass fraction of CaMg(CO<sub>3</sub>)<sub>2</sub> in the dolomite;  
29 for soda ash, the mass fraction of sodium carbonate (Na<sub>2</sub>CO<sub>3</sub>) in the soda ash; for barium  
30 carbonate, the mass fraction of barium carbonate (BaCO<sub>3</sub>) in the barium carbonate; for potassium  
31 carbonate, the mass fraction of potassium carbonate (K<sub>2</sub>CO<sub>3</sub>) in the potassium carbonate; for

Subpart A-General Provisions

1 lithium carbonate, the mass fraction of lithium carbonate ( $\text{Li}_2\text{CO}_3$ ); and for strontium carbonate,  
2 the mass fraction of strontium carbonate ( $\text{SrCO}_3$ ).

3 *Carbonate-based raw material* means any of the following materials used in the manufacture  
4 of glass: limestone, dolomite, soda ash, barium carbonate, potassium carbonate, lithium  
5 carbonate, and strontium carbonate.

6 *Catalytic cracking unit* means a refinery process unit in which petroleum derivatives are  
7 continuously charged and hydrocarbon molecules in the presence of a catalyst are fractured into  
8 smaller molecules, or react with a contact material suspended in a fluidized bed to improve  
9 feedstock quality for additional processing and the catalyst or contact material is continuously  
10 regenerated by burning off coke and other deposits. Catalytic cracking units include both  
11 fluidized bed systems, which are referred to as fluid catalytic cracking units (FCCU), and  
12 moving bed systems, which are also referred to as thermal catalytic cracking units. The unit  
13 includes the riser, reactor, regenerator, air blowers, spent catalyst or contact material stripper,  
14 catalyst or contact material recovery equipment, and regenerator equipment for controlling air  
15 pollutant emissions and for heat recovery.

16 *Cement kiln dust* means non-calcined to fully calcined dust produced in the kiln or  
17 pyroprocessing line. Cement kiln dust is a fine-grained, solid, highly alkaline material removed  
18 from the cement kiln exhaust gas by scrubbers (filtration baghouses and/or  
19 electrostatic precipitators).

20 *Cogeneration unit* means a unit that produces electrical energy and useful thermal energy for  
21 industrial, commercial, or heating or cooling purposes, through the sequential or simultaneous  
22 use of the original fuel energy.

23 *Decarburization vessel* means any vessel used to further refine molten steel with the primary  
24 intent of reducing the carbon content of the steel, including but not limited to vessels used for  
25 argon-oxygen decarburization and vacuum oxygen decarburization vessels.

26 *Deep bedding systems for cattle swine* means a manure management system in which, as  
27 manure accumulates, bedding is continually added to absorb moisture over a production cycle  
28 and possibly for as long as 6 to 12 months. This manure management system also is known as a  
29 bedded pack manure management system and may be combined with a dry lot or pasture.

## Subpart A-General Provisions

1        *CBOB-Summer* (conventional blendstock for oxygenate blending) means a petroleum product  
2 which, when blended with a specified type and percentage of oxygenate, meets the definition of  
3 Conventional-Summer.

4        *CBOB-Winter* (conventional blendstock for oxygenate blending) means a petroleum product  
5 which, when blended with a specified type and percentage of oxygenate, meets the definition of  
6 Conventional-Winter.

7        *Certified standards* means calibration gases certified by the manufacturer of the calibration  
8 gases to be accurate to within 2 percent of the value on the label or calibration gases.

9        *CH4* means methane.

10       *Chemical recovery combustion unit* means a combustion device, such as a recovery furnace or  
11 fluidized-bed reactor where spent pulping liquor from sulfite or semi-chemical pulping processes  
12 is burned to recover pulping chemicals.

13       *Chemical recovery furnace* means an enclosed combustion device where concentrated spent  
14 liquor produced by the kraft or soda pulping process is burned to recover pulping chemicals and  
15 produce steam. Includes any recovery furnace that burns spent pulping liquor produced from  
16 both the kraft and soda pulping processes.

17       *Chloride process* means a production process where titanium dioxide is produced using  
18 calcined petroleum coke and chlorine as raw materials.

19       *City gate* means a location at which natural gas ownership or control passes from one party to  
20 another, neither of which is the ultimate consumer. In this rule, in keeping with common  
21 practice, the term refers to a point or measuring station at which a local gas distribution utility  
22 receives gas from a natural gas pipeline company or transmission system. Meters at the city gate  
23 station measure the flow of natural gas into the local distribution company system and typically  
24 are used to measure local distribution company system sendout to customers.

25       *CO2* means carbon dioxide.

26       *Coal* means all solid fuels classified as anthracite, bituminous, sub-bituminous, or lignite by  
27 the American Society for Testing and Materials Designation ASTM D388–05 Standard  
28 Classification of Coals by Rank (incorporated by reference, see §98.7).

29       *COD* means the chemical oxygen demand as determined using methods specified pursuant to  
30 40 CFR part 136.

## Subpart A-General Provisions

1        *Coke burn-off* means the coke removed from the surface of a catalyst by combustion during  
2 catalyst regeneration. Coke burn-off also means the coke combusted in fluid coking unit burner.  
3 Cokemaking means the production of coke from coal in either a by-product coke oven battery or  
4 a non-recovery coke oven battery.

5        *Commercial Applications* means executing a commercial transaction subject to a contract. A  
6 commercial application includes transferring custody of a product from one facility to another if  
7 it otherwise meets the definition.

8        *Company records* means, in reference to the amount of fuel consumed by a stationary  
9 combustion unit (or by a group of such units), a complete record of the methods used, the  
10 measurements made, and the calculations performed to quantify fuel usage. Company records  
11 may include, but are not limited to, direct measurements of fuel consumption by gravimetric or  
12 volumetric means, tank drop measurements, and calculated values of fuel usage obtained by  
13 measuring auxiliary parameters such as steam generation or unit operating hours. Fuel billing  
14 records obtained from the fuel supplier qualify as company records.

15        *Connector* means to flanged, screwed, or other joined fittings used to connect pipe line  
16 segments, tubing, pipe components (such as elbows, reducers, “T’s” or valves) or a pipe line and  
17 a piece of equipment or an instrument to a pipe, tube or piece of equipment. A common  
18 connector is a flange. Joined fittings welded completely around the circumference of the  
19 interface are not considered connectors for the purpose of this part.

20        *Container glass* means glass made of soda-lime recipe, clear or colored, which is pressed  
21 and/or blown into bottles, jars, ampoules, and other products listed in North American Industry  
22 Classification System 327213 (NAICS 327213).

23        *Continuous emission monitoring system or CEMS* means the total equipment required to  
24 sample, analyze, measure, and provide, by means of readings recorded at least once every 15  
25 minutes, a permanent record of gas concentrations, pollutant emission rates, or gas volumetric  
26 flow rates from stationary sources.

27        *Continuous glass melting furnace* means a glass melting furnace that operates continuously  
28 except during periods of maintenance, malfunction, control device installation, reconstruction, or  
29 rebuilding.

30        *Conventional—Summer* refers to finished gasoline formulated for use in motor vehicles, the  
31 composition and properties of which do not meet the requirements of the reformulated gasoline

## Subpart A-General Provisions

1 regulations promulgated by the U.S. Environmental Protection Agency under 40 CFR 80.40, but  
2 which meet summer RVP standards required under 40 CFR 80.27 or as specified by the state.

3 Note: This category excludes conventional gasoline for oxygenate blending (CBOB) as well as  
4 other blendstock.

5 *Conventional—Winter* refers to finished gasoline formulated for use in motor vehicles, the  
6 composition and properties of which do not meet the requirements of the reformulated gasoline  
7 regulations promulgated by the U.S. Environmental Protection Agency under 40 CFR 80.40 or  
8 the summer RVP standards required under 40 CFR 80.27 or as specified by the state. Note: This  
9 category excludes conventional blendstock for oxygenate blending (CBOB) as well as other  
10 blendstock.

11 *Crude oil* means a mixture of hydrocarbons that exists in liquid phase in natural underground  
12 reservoirs and remains liquid at atmospheric pressure after passing through surface separating  
13 facilities. Depending upon the characteristics of the crude stream, it may also include any of the  
14 following:

15 (1) Small amounts of hydrocarbons that exist in gaseous phase in natural underground  
16 reservoirs but are liquid at atmospheric conditions (temperature and pressure) after being  
17 recovered from oil well (casinghead) gas in lease separators and are subsequently commingled  
18 with the crude stream without being separately measured. Lease condensate recovered as a liquid  
19 from natural gas wells in lease or field separation facilities and later mixed into the crude stream  
20 is also included.

21 (2) Small amounts of non-hydrocarbons, such as sulfur and various metals.

22 (3) Drip gases, and liquid hydrocarbons produced from tar sands, oil sands, gilsonite, and oil  
23 shale.

24 (4) Petroleum products that are received or produced at a refinery and subsequently injected  
25 into a crude supply or reservoir by the same refinery owner or operator.

26 Liquids produced at natural gas processing plants are excluded. Crude oil is refined to  
27 produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels;  
28 lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy  
29 or chemical content.

## Subpart A-General Provisions

1        *Daily spread* means a manure management system component in which manure is routinely  
2 removed from a confinement facility and is applied to cropland or pasture within 24 hours of  
3 excretion.

4        *Day* means any consistently designated 24 hour period during which an emission unit is  
5 operated.

6        *Degradable organic carbon (DOC)* means the fraction of the total mass of a waste material  
7 that can be biologically degraded.

8        *Delayed coking unit* means one or more refinery process units in which high molecular weight  
9 petroleum derivatives are thermally cracked and petroleum coke is produced in a series of  
10 closed, batch system reactors. A delayed coking unit consists of the coke drums and ancillary  
11 equipment associated with a single fractionator.

12        *Density* means the mass contained in a given unit volume (mass/volume).

13        *Destruction* means, with respect to landfills and manure management, the combustion of  
14 methane in any on-site or off-site combustion technology. Destroyed methane includes, but is  
15 not limited to, methane combusted by flaring, methane destroyed by thermal oxidation, methane  
16 combusted for use in on-site energy or heat production technologies, methane that is conveyed  
17 through pipelines (including natural gas pipelines) for off-site combustion, and methane that is  
18 collected for any other on-site or off-site use as a fuel.

19        *Destruction* means, with respect to fluorinated GHGs, the expiration of a fluorinated GHG to  
20 the destruction efficiency actually achieved. Such destruction does not result in a commercially  
21 useful end product.

22        *Destruction Efficiency* means the efficiency with which a destruction device reduces the  
23 GWP-weighted mass of greenhouse gases fed into the device, considering the GWP-weighted  
24 masses of both the greenhouse gases fed into the device and those exhausted from the device.  
25 Destruction efficiency, or flaring destruction efficiency, refers to the fraction of the gas that  
26 leaves the flare partially or fully oxidized. The Destruction Efficiency is expressed in Equation  
27 A-2 of this section:

$$28 \qquad DE = 1 - \frac{tCO_2e_{OUT}}{tCO_2e_{IN}} \qquad \text{(Eq. A-2)}$$

29        Where:

30

## Subpart A-General Provisions

1 DE = Destruction Efficiency

2  $tCO_2e_{IN}$  = The GWP-weighted mass of GHGs fed into the destruction device

3  $tCO_2e_{OUT}$  = The GWP-weighted mass of GHGs exhausted from the destruction device,  
4 including GHGs formed during the destruction process

5

6 *Diesel-Other* is any distillate fuel oil not defined elsewhere, including Diesel Treated as  
7 Blendstock (DTAB).

8 *DIPE* (diisopropyl ether,  $(CH_3)_2CHOCH(CH_3)_2$ ) is an ether as described in "Oxygenates."

9 *Direct liquefaction* means the conversion of coal directly into liquids, rather than passing  
10 through an intermediate gaseous state.

11 *Direct reduction furnace* means a high temperature furnace typically fired with natural gas to  
12 produce solid iron from iron ore or iron ore pellets and coke, coal, or other carbonaceous  
13 materials.

14 *Distillate Fuel Oil* means a classification for one of the petroleum fractions produced in  
15 conventional distillation operations and from crackers and hydrotreating process units. The  
16 generic term distillate fuel oil includes kerosene, diesel fuels (Diesel Fuels No. 1, No. 2, and No.  
17 4), and fuel oils (Fuel Oils No. 1, No. 2, and No. 4).

18 *Distillate Fuel No. 1* has a maximum distillation temperature of 550 °F at the 90 percent  
19 recovery point and a minimum flash point of 100 °F and includes fuels commonly known as  
20 Diesel Fuel No. 1 and Fuel Oil No. 1, but excludes kerosene. This fuel is further subdivided into  
21 categories of sulfur content: High Sulfur (greater than 500 ppm), Low Sulfur (less than or equal  
22 to 500 ppm and greater than 15 ppm), and Ultra Low Sulfur (less than or equal to 15 ppm).

23 *Distillate Fuel No. 2* has a minimum and maximum distillation temperature of 540 °F and 640  
24 °F at the 90 percent recovery point, respectively, and includes fuels commonly known as Diesel  
25 Fuel No. 2 and Fuel Oil No. 2. This fuel is further subdivided into categories of sulfur content:  
26 High Sulfur (greater than 500 ppm), Low Sulfur (less than or equal to 500 ppm and greater than  
27 15 ppm), and Ultra Low Sulfur (less than or equal to 15 ppm).

28 *Distillate Fuel No. 4* is a distillate fuel oil made by blending distillate fuel oil and residual fuel  
29 oil, with a minimum flash point of 131 °F.

30  $DOC_f$  means the fraction of DOC that actually decomposes under the (presumably anaerobic)  
31 conditions within the landfill.

## Subpart A-General Provisions

1        *Dry lot* means a manure management system component consisting of a paved or unpaved  
2 open confinement area without any significant vegetative cover where accumulating manure may  
3 be removed periodically.

4        *Electric arc furnace (EAF)* means a furnace that produces molten alloy metal and heats the  
5 charge materials with electric arcs from carbon electrodes.

6        *Electric arc furnace steelmaking* means the production of carbon, alloy, or specialty steels  
7 using an EAF. This definition excludes EAFs at steel foundries and EAFs used to produce  
8 nonferrous metals.

9        *Electrothermic furnace* means a furnace that heats the charged materials with electric arcs  
10 from carbon electrodes.

11        *Emergency generator* means a stationary combustion device, such as a reciprocating internal  
12 combustion engine or turbine that serves solely as a secondary source of mechanical or electrical  
13 power whenever the primary energy supply is disrupted or discontinued during power outages or  
14 natural disasters that are beyond the control of the owner or operator of a facility. An emergency  
15 generator operates only during emergency situations, for training of personnel under simulated  
16 emergency conditions, as part of emergency demand response procedures, or for standard  
17 performance testing procedures as required by law or by the generator manufacturer. A  
18 generator that serves as a back-up power source under conditions of load shedding, peak shaving,  
19 power interruptions pursuant to an interruptible power service agreement, or scheduled facility  
20 maintenance shall not be considered an emergency generator.

21        *Emergency equipment* means any auxiliary fossil fuel-powered equipment, such as a fire  
22 pump, that is used only in emergency situations.

23        *ETBE* (ethyl tertiary butyl ether,  $(\text{CH}_3)_3\text{COC}_2\text{H}_5$ ) is an ether as described in "Oxygenates."

24        *Ethane* is a paraffinic hydrocarbon with molecular formula  $\text{C}_2\text{H}_6$ .

25        *Ethanol* is an anhydrous alcohol with molecular formula  $\text{C}_2\text{H}_5\text{OH}$ .

26        *Ethylene* is an olefinic hydrocarbon with molecular formula  $\text{C}_2\text{H}_4$ .

27        *Ex refinery gate* means the point at which a petroleum product leaves the refinery.

28        *Experimental furnace* means a glass melting furnace with the sole purpose of operating to  
29 evaluate glass melting processes, technologies, or glass products. An experimental furnace does  
30 not produce glass that is sold (except for further research and development purposes) or that is  
31 used as a raw material for non-experimental furnaces.

## Subpart A-General Provisions

1        *Export* means to transport a product from inside the United States to persons outside the  
2 United States, excluding any such transport on behalf of the United States military including  
3 foreign military sales under the Arms Export Control Act.

4        *Exporter* means any person, company or organization of record that transfers for sale or for  
5 other benefit, domestic products from the United States to another country or to an affiliate in  
6 another country, excluding any such transfers on behalf of the United States military or military  
7 purposes including foreign military sales under the Arms Export Control Act. An exporter is not  
8 the entity merely transporting the domestic products, rather an exporter is the entity deriving the  
9 principal benefit from the transaction.

10       *Facility* means any physical property, plant, building, structure, source, or stationary  
11 equipment located on one or more contiguous or adjacent properties in actual physical contact or  
12 separated solely by a public roadway or other public right-of-way and under common ownership  
13 or common control, that emits or may emit any greenhouse gas. Operators of military  
14 installations may classify such installations as more than a single facility based on distinct and  
15 independent functional groupings within contiguous military properties.

16       *Feed* means the prepared and mixed materials, which include but are not limited to materials  
17 such as limestone, clay, shale, sand, iron ore, mill scale, cement kiln dust and flyash, that are fed  
18 to the kiln. Feed does not include the fuels used in the kiln to produce heat to form the clinker  
19 product.

20       *Feedstock* means raw material inputs to a process that are transformed by reaction, oxidation,  
21 or other chemical or physical methods into products and by-products. Supplemental fuel burned  
22 to provide heat or thermal energy is not a feedstock.

23       *Fischer-Tropsch process* means a catalyzed chemical reaction in which synthesis gas, a  
24 mixture of carbon monoxide and hydrogen, is converted into liquid hydrocarbons of various  
25 forms.

26       *Flare* means a combustion device, whether at ground level or elevated, that uses an open  
27 flame to burn combustible gases with combustion air provided by uncontrolled ambient air  
28 around the flame.

29       *Flat glass* means glass made of soda-lime recipe and produced into continuous flat sheets and  
30 other products listed in NAICS 327211.

## Subpart A-General Provisions

1        *Flowmeter* means a device that measures the mass or volumetric rate of flow of a gas, liquid,  
2 or solid moving through an open or closed conduit (e.g. flowmeters include, but are not limited  
3 to, rotameters, turbine meters, coriolis meters, orifice meters, ultra-sonic flowmeters, and vortex  
4 flowmeters).

5        *Fluid coking unit* means one or more refinery process units in which high molecular weight  
6 petroleum derivatives are thermally cracked and petroleum coke is continuously produced in a  
7 fluidized bed system. The fluid coking unit includes equipment for controlling air pollutant  
8 emissions and for heat recovery on the fluid coking burner exhaust vent. There are two basic  
9 types of fluid coking units: a traditional fluid coking unit in which only a small portion of the  
10 coke produced in the unit is burned to fuel the unit and the fluid coking burner exhaust vent is  
11 directed to the atmosphere (after processing in a CO boiler or other air pollutant control  
12 equipment) and a flexicoking unit in which an auxiliary burner is used to partially combust a  
13 significant portion of the produced petroleum coke to generate a low value fuel gas that is used  
14 as fuel in other combustion sources at the refinery.

15        *Fluorinated greenhouse gas* means sulfur hexafluoride (SF<sub>6</sub>), nitrogen trifluoride (NF<sub>3</sub>), and  
16 any fluorocarbon except for controlled substances as defined at 40 CFR part 82, subpart A and  
17 substances with vapor pressures of less than 1 mm of Hg absolute at 25 degrees C. With these  
18 exceptions, “fluorinated GHG” includes but is not limited to any hydrofluorocarbon, any  
19 perfluorocarbon, any fully fluorinated linear, branched or cyclic alkane, ether, tertiary amine or  
20 aminoether, any perfluoropolyether, and any hydrofluoropolyether.

21        *Fossil fuel* means natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel  
22 derived from such material, including for example, consumer products that are derived from such  
23 materials and are combusted.

24        *Fossil fuel-fired* means powered by combustion of fossil fuel, alone or in combination with  
25 any other fuel, regardless of the percentage of fossil fuel consumed.

26        *Fractionators* means plants that produce fractionated natural gas liquids (NGLs) extracted  
27 from produced natural gas and separate the NGLs individual component products: ethane,  
28 propane, butanes and pentane-plus (C<sub>5</sub>+). Plants that only process natural gas but do not  
29 fractionate NGLs further into component products are not considered fractionators. Some  
30 fractionators do not process production gas, but instead fractionate bulk NGLs received from

## Subpart A-General Provisions

1 natural gas processors. Some fractionators both process natural gas and fractionate bulk NGLs  
2 received from other plants.

3 *Fuel* means solid, liquid or gaseous combustible material.

4 *Fuel gas* means gas generated at a petroleum refinery, petrochemical plant, or similar  
5 industrial process unit, and that is combusted separately or in any combination with any type of  
6 gas.

7 *Fuel gas system* means a system of compressors, piping, knock-out pots, mix drums, and, if  
8 necessary, units used to remove sulfur contaminants from the fuel gas (e.g., amine scrubbers)  
9 that collects fuel gas from one or more sources for treatment, as necessary, and transport to a  
10 stationary combustion unit. A fuel gas system may have an overpressure vent to a flare but the  
11 primary purpose for a fuel gas system is to provide fuel to the various combustion units at the  
12 refinery or petrochemical plant.

13 *Gas collection system or landfill gas collection system* means a system of pipes used to collect  
14 landfill gas from different locations in the landfill by means of a fan or similar mechanical draft  
15 equipment to a single location for treatment (thermal destruction) or use. Landfill gas collection  
16 systems may also include knock-out or separator drums and/or a compressor. A single landfill  
17 may have multiple gas collection systems. Landfill gas collection systems do not include  
18 “passive” systems, whereby landfill gas flows naturally to the surface of the landfill where an  
19 opening or pipe (vent) is installed to allow for natural gas flow.

20 *Gas-fired unit* means a stationary combustion unit that derives more than 50 percent of its  
21 annual heat input from the combustion of gaseous fuels, and the remainder of its annual heat  
22 input from the combustion of fuel oil or other liquid fuels.

23 *Gas monitor* means an instrument that continuously measures the concentration of a particular  
24 gaseous species in the effluent of a stationary source.

25 *Gaseous fuel* means a material that is in the gaseous state at standard atmospheric temperature  
26 and pressure conditions and that is combusted to produce heat and/or energy.

27 *Gasification* means the conversion of a solid or liquid raw material into a gas.

28 *Gasoline – Other* is any gasoline that is not defined elsewhere, including GTAB (gasoline  
29 treated as blendstock).

30 *Glass melting furnace* means a unit comprising a refractory-lined vessel in which raw  
31 materials are charged and melted at high temperature to produce molten glass.

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1        *Glass* produced means the weight of glass exiting a glass melting furnace.

2        *Global warming potential or GWP* means the ratio of the time-integrated radiative forcing  
3 from the instantaneous release of one kilogram of a trace substance relative to that of one  
4 kilogram- of a reference gas, i.e., CO<sub>2</sub>.

5        *GPA* means the Gas Processors Association.

6        *Greenhouse gas or GHG* means carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O),  
7 sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other  
8 fluorinated greenhouse gases as defined in this section.

9        *GTBA* (gasoline-grade tertiary butyl alcohol, (CH<sub>3</sub>)<sub>3</sub>COH), or t-butanol, is an alcohol as  
10 described in "Oxygenates."

11        *Heavy Gas Oils* are petroleum distillates with an approximate boiling range from 651 °F to  
12 1,000 °F.

13        *Heel* means the amount of gas that remains in a shipping container after it is discharged or  
14 off-loaded (that is no more than ten percent of the volume of the container).

15        *High heat value or HHV* means the high or gross heat content of the fuel with the heat of  
16 vaporization included. The water is assumed to be in a liquid state.

17        *Hydrofluorocarbons or HFCs* means a class of GHGs consisting of hydrogen, fluorine, and  
18 carbon.

19        *Import* means, to land on, bring into, or introduce into, any place subject to the jurisdiction of  
20 the United States whether or not such landing, bringing, or introduction constitutes an  
21 importation within the meaning of the customs laws of the United States, with the following  
22 exemptions:

23        (1) Off-loading used or excess fluorinated GHGs or nitrous oxide of U.S. origin from a ship  
24 during servicing.

25        (2) Bringing fluorinated GHGs or nitrous oxide into the U.S. from Mexico where the  
26 fluorinated GHGs or nitrous oxide had been admitted into Mexico in bond and were of U.S.  
27 origin.

28        (3) Bringing fluorinated GHGs or nitrous oxide into the U.S. when transported in a  
29 consignment of personal or household effects or in a similar non-commercial situation normally  
30 exempted from U.S. Customs attention.

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1 (4) Bringing fluorinated GHGs or nitrous into U.S. jurisdiction exclusively for U. S. military  
2 purposes.

3 *Importer* means any person, company, or organization of record that for any reason brings a  
4 product into the United States from a foreign country, excluding introduction into U.S.  
5 jurisdiction exclusively for United States military purposes. An importer is the person, company,  
6 or organization primarily liable for the payment of any duties on the merchandise or an  
7 authorized agent acting on their behalf. The term includes, as appropriate:

8 (1) The consignee.

9 (2) The importer of record.

10 (3) The actual owner.

11 (4) The transferee, if the right to draw merchandise in a bonded warehouse has been  
12 transferred.

13 *Indurating furnace* means a furnace where unfired taconite pellets, called green balls, are  
14 hardened at high temperatures to produce fired pellets for use in a blast furnace. Types of  
15 indurating furnaces include straight gate and grate kiln furnaces.

16 *Industrial greenhouse gases* means nitrous oxide or any fluorinated greenhouse gas.

17 *In-line kiln/raw mill* means a system in a portland cement production process where a dry kiln  
18 system is integrated with the raw mill so that all or a portion of the kiln exhaust gases are used to  
19 perform the drying operation of the raw mill, with no auxiliary heat source used. In this system  
20 the kiln is capable of operating without the raw mill operating, but the raw mill cannot operate  
21 without the kiln gases, and consequently, the raw mill does not generate a separate exhaust gas  
22 stream.

23 *Isobutane* is a paraffinic branch chain hydrocarbon with molecular formula C<sub>4</sub>H<sub>10</sub>.

24 *Isobutylene* is an olefinic branch chain hydrocarbon with molecular formula C<sub>4</sub>H<sub>8</sub>.

25 *Kerosene* is a light petroleum distillate with a maximum distillation temperature of 400 °F at  
26 the 10-percent recovery point, a final maximum boiling point of 572 °F, a minimum flash point  
27 of 100 °F, and a maximum freezing point of -22 °F. Included are No. 1-K and No. 2-K,  
28 distinguished by maximum sulfur content (0.04 and 0.30 percent of total mass, respectively), as  
29 well as all other grades of kerosene called range or stove oil. Excluded is kerosene-type jet fuel  
30 (see definition herein).

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1        *Kerosene-Type Jet Fuel* means a kerosene-based product used in commercial and military  
2 turbojet and turboprop aircraft. The product has a maximum distillation temperature of 400 °F at  
3 the 10 percent recovery point and a final maximum boiling point of 572 °F. Included are Jet A,  
4 Jet A-1, JP-5, and JP-8.

5        *Kiln* means an oven, furnace, or heated enclosure used for thermally processing a mineral or  
6 mineral-based substance.

7        *Landfill* means an area of land or an excavation in which wastes are placed for permanent  
8 disposal and that is not a land application unit, surface impoundment, injection well, or waste  
9 pile as those terms are defined under 40 CFR 257.2.

10       *Landfill gas* means gas produced as a result of anaerobic decomposition of waste materials in  
11 the landfill. Landfill gas generally contains 40 to 60 percent methane on a dry basis, typically  
12 less than 1 percent non-methane organic chemicals, and the remainder being carbon dioxide.

13       *Lime* is the generic term for a variety of chemical compounds that are produced by the  
14 calcination of limestone or dolomite. These products include but are not limited to calcium  
15 oxide, high-calcium quicklime, calcium hydroxide, hydrated lime, dolomitic quicklime, and  
16 dolomitic hydrate.

17       *Liquid/Slurry* means a manure management component in which manure is stored as excreted  
18 or with some minimal addition of water to facilitate handling and is stored in either tanks or  
19 earthen ponds, usually for periods less than one year.

20       *Lubricants* include all grades of lubricating oils, from spindle oil to cylinder oil to those used  
21 in greases. Petroleum lubricants may be produced from distillates or residues.

22       *Makeup chemicals* means carbonate chemicals (e.g., sodium and calcium carbonates) that are  
23 added to the chemical recovery areas of chemical pulp mills to replace chemicals lost in the  
24 process.

25       *Manure composting* means the biological oxidation of a solid waste including manure usually  
26 with bedding or another organic carbon source typically at thermophilic temperatures produced  
27 by microbial heat production. There are four types of composting employed for manure  
28 management: static, in vessel, intensive windrow and passive windrow. Static composting  
29 typically occurs in an enclosed channel, with forced aeration and continuous mixing. In vessel  
30 composting occurs in piles with forced aeration but no mixing. Intensive windrow composting

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1 occurs in windrows with regular turning for mixing and aeration. Passive windrow composting  
2 occurs in windrows with infrequent turning for mixing and aeration.

3 *Maximum rated heat input capacity* means the hourly heat input to a unit (in mmBtu/hr),  
4 when it combusts the maximum amount of fuel per hour that it is capable of combusting on a  
5 steady state basis, as of the initial installation of the unit, as specified by the manufacturer.

6 *Maximum rated input capacity* means the maximum charging rate of a municipal waste  
7 combustor unit expressed in tons per day of municipal solid waste combusted, calculated  
8 according to the procedures under 40 CFR 60.58b(j).

9 *Mcf* means thousand cubic feet.

10 *Methane conversion factor* means the extent to which the CH<sub>4</sub> producing capacity (Bo) is  
11 realized in each type of treatment and discharge pathway and system. Thus, it is an indication of  
12 the degree to which the system is anaerobic.

13 *Methane correction factor* means an adjustment factor applied to the methane generation rate  
14 to account for portions of the landfill that remain aerobic. The methane correction factor can be  
15 considered the fraction of the total landfill waste volume that is ultimately disposed of in an  
16 anaerobic state. Managed landfills that have soil or other cover materials have a methane  
17 correction factor of 1.

18 *Methanol* (CH<sub>3</sub>OH) is an alcohol as described in "Oxygenates."

19 *Midgrade gasoline* has an octane rating greater than or equal to 88 and less than or equal to  
20 90. This definition applies to the midgrade categories of Conventional-Summer, Conventional-  
21 Winter, Reformulated-Summer, and Reformulated-Winter. For midgrade categories of RBOB-  
22 Summer, RBOB-Winter, CBOB-Summer, and CBOB-Winter, this definition refers to the  
23 expected octane rating of the finished gasoline after oxygenate has been added to the RBOB or  
24 CBOB.

25 *Miscellaneous Products* include all refined petroleum products not defined elsewhere. It  
26 includes, but is not limited to, naphtha-type jet fuel (Jet B and JP-4), petrolatum lube refining by-  
27 products (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels,  
28 synthetic natural gas feedstocks, waste feedstocks, and specialty oils. It excludes organic waste  
29 sludges, tank bottoms, spent catalysts, and sulfuric acid.

30 *MMBtu* means million British thermal units.

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1        *Motor gasoline (finished)* means a complex mixture of volatile hydrocarbons, with or without  
2 additives, suitably blended to be used in spark ignition engines. Motor gasoline includes  
3 conventional gasoline, reformulated gasoline, and all types of oxygenated gasoline. Gasoline also  
4 has seasonal variations in an effort to control ozone levels. This is achieved by lowering the Reid  
5 Vapor Pressure (RVP) of gasoline during the summer driving season. Depending on the region  
6 of the country the RVP is lowered to below 9.0 psi or 7.8 psi. The RVP may be further lowered  
7 by state regulations.

8        *Mscf* means thousand standard cubic feet.

9        *MTBE* (methyl tertiary butyl ether,  $(\text{CH}_3)_3\text{COCH}_3$ ) is an ether as described in "Oxygenates."  
10 Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous  
11 geographical space where household waste is placed in or on land. An MSW landfill may also  
12 receive other types of RCRA Subtitle D wastes (40 CFR 257.2) such as commercial solid waste,  
13 nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid  
14 waste. Portions of an MSW landfill may be separated by access roads, public roadways, or other  
15 public right-of-ways. An MSW landfill may be publicly or privately owned.

16 Municipal solid waste or MSW means solid phase household, commercial/retail, and/or  
17 institutional waste, such as, but not limited to, yard waste and refuse.

18  $\text{N}_2\text{O}$  means nitrous oxide.

19        *Naphthas (< 401 °F)* is a generic term applied to a petroleum fraction with an approximate  
20 boiling range between 122 °F and 400 °F. The naphtha fraction of crude oil is the raw material  
21 for gasoline and is composed largely of paraffinic hydrocarbons.

22        *Natural gas* means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases  
23 found in geologic formations beneath the earth's surface, of which its constituents include, but  
24 are not limited to, methane, heavier hydrocarbons and carbon dioxide. Natural gas may be field  
25 quality (which varies widely) or pipeline quality. For the purposes of this subpart, the definition  
26 of natural gas includes similarly constituted fuels such as field production gas, process gas, and  
27 fuel gas.

28        *Natural Gas Liquids (NGLs)* means those hydrocarbons in natural gas that are separated from  
29 the gas as liquids through the process of absorption, condensation, adsorption, or other methods  
30 at lease separators and field facilities. Generally, such liquids consist of ethane, propane,

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1 butanes, and pentanes plus. Bulk NGLs refers to mixtures of NGLs that are sold or delivered as  
2 undifferentiated product from natural gas processing plants.

3 *Natural gasoline* means a mixture of liquid hydrocarbons (mostly pentanes and heavier  
4 hydrocarbons) extracted from natural gas. It includes isopentane.

5 *NIST* means the United States National Institute of Standards and Technology.

6 *Nitric acid production line* means a series of reactors and absorbers used to produce nitric  
7 acid.

8 *Nitrogen excreted* is the nitrogen that is excreted by livestock in manure and urine.

9 *Non-crude feedstocks* means any petroleum product or natural gas liquid that enters the  
10 refinery to be further refined or otherwise used on site.

11 *Non-recovery coke oven battery* means a group of ovens connected by common walls and  
12 operated as a unit, where coal undergoes destructive distillation under negative pressure to  
13 produce coke, and which is designed for the combustion of the coke oven gas from which by-  
14 products are not recovered.

15 *North American Industry Classification System (NAICS) code(s)* means the six-digit code(s)  
16 that represents the product(s)/activity(s)/ service(s) at a facility or supplier as listed in the Federal  
17 Register and defined in “North American Industrial Classification System Manual 2007,”  
18 available from the U.S. Department of Commerce, National Technical Information Service,  
19 Alexandria, VA 22312, phone (703) 605–6000 or (800) 553–6847. [http://www.census.gov/eos/  
20 www/naics/](http://www.census.gov/eos/www/naics/).

21 *Oil-fired unit* means a stationary combustion unit that derives more than 50 percent of its  
22 annual heat input from the combustion of fuel oil, and the remainder of its annual heat input from  
23 the combustion of natural gas or other gaseous fuels.

24 *Open-ended valve or Lines (OELs)* means any valve, except pressure relief valves, having one  
25 side of the valve seat in contact with process fluid and one side open to atmosphere, either  
26 directly or through open piping.

27 *Operating hours* means the duration of time in which a process or process unit is utilized; this  
28 excludes shutdown, maintenance, and standby.

29 *Operational change* means, for purposes of §98.3(b), a change in the type of feedstock or fuel  
30 used, a change in operating hours, or a change in process production rate.

31 *Operator* means any person who operates or supervises a facility or supplier.

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1        *Other Oils (> 401 °F)* are oils with a boiling range equal to or greater than 401 °F that are  
2 generally intended for use as a petrochemical feedstock and are not defined elsewhere.

3        *Owner* means any person who has legal or equitable title to, has a leasehold interest in, or  
4 control of a facility or supplier, except a person whose legal or equitable title to or leasehold  
5 interest in the facility or supplier arises solely because the person is a limited partner in a  
6 partnership that has legal or equitable title to, has a leasehold interest in, or control of the facility  
7 or supplier shall not be considered an “owner” of the facility or supplier.

8        *Oxygenates* means substances which, when added to gasoline, increase the oxygen content of  
9 the gasoline. Common oxygenates are ethanol, methyl tertiary butyl ether (MTBE), ethyl tertiary  
10 butyl ether (ETBE), tertiary amyl methyl ether (TAME), diisopropyl ether (DIPE), and methanol.

11        *Pasture/Range/Paddock* means the manure from pasture and range grazing animals is allowed  
12 to lie as deposited, and is not managed.

13        *Pentanes Plus, or C5+*, is a mixture of hydrocarbons that is a liquid at ambient temperature  
14 and pressure, and consists mostly of pentanes (five carbon chain) and higher carbon number  
15 hydrocarbons. Pentanes plus includes, but is not limited to, normal pentane, isopentane,  
16 hexanes-plus (natural gasoline), and plant condensate.

17        *Perfluorocarbons or PFCs* means a class of greenhouse gases consisting on the molecular  
18 level of carbon and fluorine.

19        *Petrochemical* means methanol, acrylonitrile, ethylene, ethylene oxide, ethylene dichloride,  
20 and any form of carbon black.

21        *Petrochemical Feedstocks* means feedstocks derived from petroleum for the manufacture of  
22 chemicals, synthetic rubber, and a variety of plastics. This category is usually divided into  
23 naphthas less than 401 °F and other oils greater than 401 °F.

24        *Petroleum* means oil removed from the earth and the oil derived from tar sands and shale.

25        *Petroleum coke* means a black solid residue, obtained mainly by cracking and carbonizing of  
26 petroleum derived feedstocks, vacuum bottoms, tar and pitches in processes such as delayed  
27 coking or fluid coking. It consists mainly of carbon (90 to 95 percent), has low ash content, and  
28 may be used as a feedstock in coke ovens. This product is also known as marketable coke or  
29 catalyst coke.

30        *Petroleum product* means all refined and semi-refined products that are produced at a refinery  
31 by processing crude oil and other petroleum-based feedstocks, including petroleum products

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1 derived from co-processing biomass and petroleum feedstock together, but not including plastics  
2 or plastic products. Petroleum products may be combusted for energy use, or they may be used  
3 either for non-energy processes or as non-energy products. The definition of petroleum product  
4 for importers and exporters excludes waxes.

5 *Physical address*, with respect to a United States parent company as defined in this section,  
6 means the street address, city, state and zip code of that company's physical location.

7 *Pit storage below animal confinement (deep pits)* means the collection and storage of manure  
8 typically below a slatted floor in an enclosed animal confinement facility. This usually occurs  
9 with little or no added water for periods less than one year.

10 *Portable* means designed and capable of being carried or moved from one location to another.  
11 Indications of portability include but are not limited to wheels, skids, carrying handles, dolly,  
12 trailer, or platform. Equipment is not portable if any one of the following conditions exists:

13 (1) The equipment is attached to a foundation.

14 (2) The equipment or a replacement resides at the same location for more than 12 consecutive  
15 months.

16 (3) The equipment is located at a seasonal facility and operates during the full annual  
17 operating period of the seasonal facility, remains at the facility for at least two years, and  
18 operates at that facility for at least three months each year.

19 (4) The equipment is moved from one location to another in an attempt to circumvent the  
20 portable residence time requirements of this definition.

21 *Poultry manure with litter* means a manure management system component that is similar to  
22 cattle and swine deep bedding except usually not combined with a dry lot or pasture. The system  
23 is typically used for poultry breeder flocks and for the production of meat type chickens (broiler)  
24 and other fowl.

25 *Poultry manure without litter* means a manure management system component that may  
26 manage manure in a liquid form, similar to open pits in enclosed animal confinement facilities.  
27 These systems may alternatively be designed and operated to dry manure as it accumulates. The  
28 latter is known as a high-rise manure management system and is a form of passive windrow  
29 manure composting when designed and operated properly.

30 *Precision* of a measurement at a specified level(e.g., one percent of full scale or one percent  
31 of the value measured) means that 95 percent of repeat measurements made by a device or

## Subpart A-General Provisions

1 technique are within the range bounded by the mean of the measurements plus or minus the  
2 specified level.

3 *Premium grade gasoline* is gasoline having an antiknock index, i.e., octane rating, greater  
4 than 90. This definition applies to the premium grade categories of Conventional-Summer,  
5 Conventional-Winter, Reformulated-Summer, and Reformulated-Winter. For premium grade  
6 categories of RBOB-Summer, RBOB-Winter, CBOB-Summer, and CBOB-Winter, this  
7 definition refers to the expected octane rating of the finished gasoline after oxygenate has been  
8 added to the RBOB or CBOB.

9 *Pressed and blown glass* means glass which is pressed, blown, or both, into products such as  
10 light bulbs, glass fiber, technical glass, and other products listed in NAICS 327212.

11 *Pressure relief device or pressure relief valve or pressure safety valve* means a safety device  
12 used to prevent operating pressures from exceeding the maximum allowable working pressure of  
13 the process equipment. A common pressure relief device is but not limited to a spring-loaded  
14 pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5  
15 psig or by a vacuum are not pressure relief devices.

16 *Process emissions* means the emissions from industrial processes (e.g., cement production,  
17 ammonia production) involving chemical or physical transformations other than fuel  
18 combustion. For example, the calcination of carbonates in a kiln during cement production or  
19 the oxidation of methane in an ammonia process results in the release of process CO<sub>2</sub> emissions  
20 to the atmosphere. Emissions from fuel combustion to provide process heat are not part of  
21 process emissions, whether the combustion is internal or external to the process equipment.

22 *Process unit* means the equipment assembled and connected by pipes and ducts to process  
23 raw materials and to manufacture either a final product or an intermediate used in the onsite  
24 production of other products. The process unit also includes the purification of recovered  
25 byproducts.

26 *Process vent* means means a gas stream that: (1) is discharged through a conveyance to the  
27 atmosphere either directly or after passing through a control device; (2) originates from a unit  
28 operation, including but not limited to reactors (including reformers, crackers, and furnaces, and  
29 separation equipment for products and recovered byproducts); and (3) contains or has the  
30 potential to contain GHG that is generated in the process. Process vent does not include safety

## Subpart A-General Provisions

1 device discharges, equipment leaks, gas streams routed to a fuel gas system or to a flare,  
2 discharges from storage tanks.

3 *Propane* is a paraffinic hydrocarbon with molecular formula C<sub>3</sub>H<sub>8</sub>.

4 *Propylene* is an olefinic hydrocarbon with molecular formula C<sub>3</sub>H<sub>6</sub>.

5 *Pulp mill lime kiln* means the combustion units (e.g., rotary lime kiln or fluidized bed  
6 calciner) used at a kraft or soda pulp mill to calcine lime mud, which consists primarily of  
7 calcium carbonate, into quicklime, which is calcium oxide.

8 *Pushing* means the process of removing the coke from the coke oven at the end of the coking  
9 cycle. Pushing begins when coke first begins to fall from the oven into the quench car and ends  
10 when the quench car enters the quench tower.

11 *Raw mill* means a ball and tube mill, vertical roller mill or other size reduction equipment,  
12 that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture  
13 may be added or removed from the feed during the grinding operation. If the raw mill is used to  
14 remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill  
15 also includes the air separator associated with the raw mill.

16 *RBOB-Summer* (reformulated blendstock for oxygenate blending) means a petroleum product  
17 which, when blended with a specified type and percentage of oxygenate, meets the definition of  
18 Reformulated-Summer.

19 *RBOB-Winter* (reformulated blendstock for oxygenate blending) means a petroleum product  
20 which, when blended with a specified type and percentage of oxygenate, meets the definition of  
21 Reformulated-Winter.

22 *Reformulated—Summer* refers to finished gasoline formulated for use in motor vehicles, the  
23 composition and properties of which meet the requirements of the reformulated gasoline  
24 regulations promulgated by the U.S. Environmental Protection Agency under 40 CFR 80.40 and  
25 40 CFR 80.41, and summer RVP standards required under 40 CFR 80.27 or as specified by the  
26 state. Reformulated gasoline excludes Reformulated Blendstock for Oxygenate Blending  
27 (RBOB) as well as other blendstock.

28 *Reformulated—Winter* refers to finished gasoline formulated for use in motor vehicles, the  
29 composition and properties of which meet the requirements of the reformulated gasoline  
30 regulations promulgated by the U.S. Environmental Protection Agency under 40 CFR 80.40 and  
31 40 CFR 80.41, but which do not meet summer RVP standards required under 40 CFR 80.27 or as

## Subpart A-General Provisions

1 specified by the state. Note: This category includes Oxygenated Fuels Program Reformulated  
2 Gasoline (OPRG). Reformulated gasoline excludes Reformulated Blendstock for Oxygenate  
3 Blending (RBOB) as well as other blendstock.

4 *Regular grade gasoline* is gasoline having an antiknock index, i.e., octane rating, greater than  
5 or equal to 85 and less than 88. This definition applies to the regular grade categories of  
6 Conventional-Summer, Conventional-Winter, Reformulated-Summer, and Reformulated-Winter.  
7 For regular grade categories of RBOB-Summer, RBOB-Winter, CBOB-Summer, and CBOB-  
8 Winter, this definition refers to the expected octane rating of the finished gasoline after  
9 oxygenate has been added to the RBOB or CBOB.

10 *Rendered animal fat*, or tallow, means fats extracted from animals which are generally used as  
11 a feedstock in making biodiesel.

12 *Research and development* means those activities conducted in process units or at laboratory  
13 bench-scale settings whose purpose is to conduct research and development for new processes,  
14 technologies, or products and whose purpose is not for the manufacture of products for  
15 commercial sale, except in a de minimis manner.

16 *Residual Fuel Oil No. 5 (Navy Special)* is a classification for the heavier fuel oil generally  
17 used in steam powered vessels in government service and inshore power plants. It has a  
18 minimum flash point of 131 °F.

19 *Residual Fuel Oil No. 6 (a.k.a. Bunker C)* is a classification for the heavier fuel oil generally  
20 used for the production of electric power, space heating, vessel bunkering and various industrial  
21 purposes. It has a minimum flash point of 140 °F.

22 *Residuum* is residue from crude oil after distilling off all but the heaviest components, with a  
23 boiling range greater than 1,000 °F.

24 *Road Oil* is any heavy petroleum oil, including residual asphaltic oil used as a dust palliative  
25 and surface treatment on roads and highways. It is generally produced in six grades, from 0, the  
26 most liquid, to 5, the most viscous.

27 *Rotary lime kiln* means a unit with an inclined rotating drum that is used to produce a lime  
28 product from limestone by calcination.

29 *Safety device* means a closure device such as a pressure relief valve, frangible disc, fusible  
30 plug, or any other type of device which functions exclusively to prevent physical damage or  
31 permanent deformation to a unit or its air emission control equipment by venting gases or vapors

## Subpart A-General Provisions

1 directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or  
2 emergency event. A safety device is not used for routine venting of gases or vapors from the  
3 vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in  
4 response to normal daily diurnal ambient temperature fluctuations. A safety device is designed  
5 to remain in a closed position during normal operations and open only when the internal  
6 pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air  
7 emission control equipment as determined by the owner or operator based on manufacturer  
8 recommendations, applicable regulations, fire protection and prevention codes and practices, or  
9 other requirements for the safe handling of flammable, combustible, explosive, reactive, or  
10 hazardous materials.

11 *Semi-refined petroleum product* means all oils requiring further processing. Included in this  
12 category are unfinished oils which are produced by the partial refining of crude oil and include  
13 the following: naphthas and lighter oils; kerosene and light gas oils; heavy gas oils; and  
14 residuum, and all products that require further processing or the addition of blendstocks.

15 *Sendout* means, in the context of a local distribution company, the total deliveries of natural  
16 gas to customers over a specified time interval (typically hour, day, month, or year). Sendout is  
17 the sum of gas received through the city gate, gas withdrawn from on-system storage or peak  
18 shaving plants, and gas produced and delivered into the distribution system; and is net of any  
19 natural gas injected into on-system storage. It comprises gas sales, exchange, deliveries, gas  
20 used by company, and unaccounted for gas. Sendout is measured at the city gate station, and  
21 other on-system receipt points from storage, peak shaving, and production.

22 *Sensor* means a device that measures a physical quantity/quality or the change in a physical  
23 quantity/quality, such as temperature, pressure, flow rate, pH, or liquid level.

24 *SF6* means sulfur hexafluoride.

25 *Shutdown* means the cessation of operation of an emission source for any purpose.

26 *Silicon carbide* means an artificial abrasive produced from silica sand or quartz and petroleum  
27 coke.

28 *Sinter process* means a process that produces a fused aggregate of fine iron-bearing materials  
29 suited for use in a blast furnace. The sinter machine is composed of a continuous traveling grate  
30 that conveys a bed of ore fines and other finely divided iron-bearing material and fuel (typically  
31 coke breeze), a burner at the feed end of the grate for ignition, and a series of downdraft

## Subpart A-General Provisions

1 windboxes along the length of the strand to support downdraft combustion and heat sufficient to  
2 produce a fused sinter product.

3 *Site* means any combination of one or more graded pad sites, gravel pad sites, foundations,  
4 platforms, or the immediate physical location upon which equipment is physically located.

5 *Smelting furnace* means a furnace in which lead-bearing materials, carbon-containing  
6 reducing agents, and fluxes are melted together to form a molten mass of material containing  
7 lead and slag.

8 *Solid storage* is the storage of manure, typically for a period of several months, in unconfined  
9 piles or stacks. Manure is able to be stacked due to the presence of a sufficient amount of  
10 bedding material or loss of moisture by evaporation.

11 *Sour gas* means any gas that contains significant concentrations of hydrogen sulfide. Sour gas  
12 may include untreated fuel gas, amine stripper off-gas, or sour water stripper gas.

13 *Special naphthas* means all finished products with the naphtha boiling range (290° to 470 °F)  
14 that are generally used as paint thinners, cleaners or solvents. These products are refined to a  
15 specified flash point. Special naphthas include all commercial hexane and cleaning solvents  
16 conforming to ASTM Specification D1836-07, Standard Specification for Commercial Hexanes,  
17 and D235-02 (Reapproved 2007), Standard Specification for Mineral Spirits (Petroleum Spirits)  
18 (Hydrocarbon Dry Cleaning Solvent), respectively. Naphthas to be blended or marketed as  
19 motor gasoline, or aviation gasoline, or that are to be used as petrochemical and synthetic natural  
20 gas (SNG) feedstocks are excluded.

21 *Spent liquor solids* means the dry weight of the solids in the spent pulping liquor that enters  
22 the chemical recovery furnace or chemical recovery combustion unit.

23 *Spent pulping liquor* means the residual liquid collected from on-site pulping operations at  
24 chemical pulp facilities that is subsequently fired in chemical recovery furnaces at kraft and soda  
25 pulp facilities or chemical recovery combustion units at sulfite or semi-chemical pulp facilities.  
26 Standard conditions or standard temperature and pressure (STP) means 68 degrees Fahrenheit  
27 and 14.7 pounds per square inch absolute.

28 *Steam reforming* means a catalytic process that involves a reaction between natural gas or  
29 other light hydrocarbons and steam. The result is a mixture of hydrogen, carbon monoxide,  
30 carbon dioxide, and water.

## Subpart A-General Provisions

1        *Still gas* means any form or mixture of gases produced in refineries by distillation, cracking,  
2 reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal  
3 butane, butylene, propane, and propylene.

4        *Storage tank* means a vessel (excluding sumps) that is designed to contain an accumulation of  
5 crude oil, condensate, intermediate hydrocarbon liquids, or produced water and that is  
6 constructed entirely of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide  
7 structural support.

8        *Sulfur recovery plant* means all process units which recover sulfur or produce sulfuric acid  
9 from hydrogen sulfide (H<sub>2</sub>S) and/or sulfur dioxide (SO<sub>2</sub>) from a common source of sour gas at a  
10 petroleum refinery. The sulfur recovery plant also includes sulfur pits used to store the  
11 recovered sulfur product, but it does not include secondary sulfur storage vessels or loading  
12 facilities downstream of the sulfur pits. For example, a Claus sulfur recovery plant includes:  
13 reactor furnace and waste heat boiler, catalytic reactors, sulfur pits, and, if present, oxidation or  
14 reduction control systems, or incinerator, thermal oxidizer, or similar combustion device.  
15 Multiple sulfur recovery units are a single sulfur recovery plant only when the units share the  
16 same source of sour gas. Sulfur recovery units that receive source gas from completely  
17 segregated sour gas treatment systems are separate sulfur recovery plants.

18        *Supplemental fuel* means a fuel burned within a petrochemical process that is not produced  
19 within the process itself.

20        *Supplier* means a producer, importer, or exporter of a fossil fuel or an industrial greenhouse  
21 gas.

22        *Taconite iron ore processing* means an industrial process that separates and concentrates iron  
23 ore from taconite, a low grade iron ore, and heats the taconite in an indurating furnace to produce  
24 taconite pellets that are used as the primary feed material for the production of iron in blast  
25 furnaces at integrated iron and steel plants.

26        *TAME* means tertiary amyl methyl ether, (CH<sub>3</sub>)<sub>2</sub>(C<sub>2</sub>H<sub>5</sub>)COCH<sub>3</sub>.

27        *Trace concentrations* means concentrations of less than 0.1 percent by mass of the process  
28 stream.

29        *Transform* means to use and entirely consume (except for trace concentrations) nitrous oxide  
30 or fluorinated GHGs in the manufacturing of other chemicals for commercial purposes.

31 Transformation does not include burning of nitrous oxide.

## Subpart A-General Provisions

1        *Transshipment* means the continuous shipment of nitrous oxide or a fluorinated GHG from a  
2 foreign state of origin through the United States or its territories to a second foreign state of final  
3 destination, as long as the shipment does not enter into United States jurisdiction. A  
4 transshipment, as it moves through the United States or its territories, cannot be re-packaged,  
5 sorted or otherwise changed in condition.

6        *Trona* means the raw material (mineral) used to manufacture soda ash; hydrated sodium  
7 bicarbonate carbonate (e.g.  $\text{Na}_2\text{CO}_3 \cdot \text{NaHCO}_3 \cdot 2\text{H}_2\text{O}$ ).

8        *Ultimate analysis* means the determination of the percentages of carbon, hydrogen, nitrogen,  
9 sulfur, and chlorine and (by difference) oxygen in the gaseous products and ash after the  
10 complete combustion of a sample of an organic material.

11       *Unfinished oils* are all oils requiring further processing, except those requiring only  
12 mechanical blending.

13       *United States* means the 50 states, the District of Columbia, and U.S. possessions and  
14 territories.

15       *United States parent company(s)* means the highest-level United States company(s) with an  
16 ownership interest in the reporting entity as of December 31 of the year for which data are being  
17 reported.

18       *Unstabilized crude oil* means, for the purposes of this part, crude oil that is pumped from the  
19 well to a pipeline or pressurized storage vessel for transport to the refinery without intermediate  
20 storage in a storage tank at atmospheric pressures. Unstabilized crude oil is characterized by  
21 having a true vapor pressure of 5 pounds per square inch absolute (psia) or greater.

22       *Valve* means any device for halting or regulating the flow of a liquid or gas through a passage,  
23 pipeline, inlet, outlet, or orifice; including, but not limited to, gate, globe, plug, ball, butterfly and  
24 needle valves.

25       *Vegetable Oil* means oils extracted from vegetation that are generally used as a feedstock in  
26 making biodiesel.

27       *Volatile solids* are the organic material in livestock manure and consist of both biodegradable  
28 and non-biodegradable fractions.

29       *Waelz kiln* means an inclined rotary kiln in which zinc-containing materials are charged  
30 together with a carbon reducing agent (e.g., petroleum coke, metallurgical coke, or anthracite  
31 coal).

Subpart A-General Provisions

1 *Waxes* means a solid or semi-solid material at 77 °F consisting of a mixture of hydrocarbons  
2 obtained or derived from petroleum fractions, or through a Fischer-Tropsch type process, in  
3 which the straight chained paraffin series predominates. This includes all marketable wax,  
4 whether crude or refined, with a congealing point between 80 (or 85) and 240 °F and a maximum  
5 oil content of 50 weight percent.

6 Wool fiberglass means fibrous glass of random texture, including fiberglass insulation, and  
7 other products listed in NAICS 327993.

8 *You* means an owner or operator subject to Part 98.

9 *Zinc smelters* means a facility engaged in the production of zinc metal, zinc oxide, or zinc  
10 alloy products from zinc sulfide ore concentrates, zinc calcine, or zinc-bearing scrap and  
11 recycled materials through the use of pyrometallurgical techniques involving the reduction and  
12 volatilization of zinc-bearing feed materials charged to a furnace.

13

14 **98.7 What standardized methods are incorporated by reference into this part?**

15 [No change.]

16

17 **98.8 What are the compliance and enforcement provisions of this part?**

18 [No change.]

19

20 **98.9 Addresses.**

21 [No change.]

22

23 **Tables A-1 through A-5**

24 [No change to Tables A-1 and A-2. Tables A-3 and A-4 are modified by Sections F and G of  
25 20.2.300.102 NMAC. Table A-5 is deleted.]

**Table A-1 of Subpart A—Global Warming Potentials (100-Year Time Horizon)**

Name	CAS #	Chemical formula	Global warming potential (100 yr.)
Carbon dioxide	124-38-9	CO <sub>2</sub>	1
Methane	74-82-8	CH <sub>4</sub>	21

Subpart A-General Provisions

**Table A-1 of Subpart A—Global Warming Potentials (100-Year Time Horizon)**

Name	CAS #	Chemical formula	Global warming potential (100 yr.)
Nitrous oxide	10024-97-2	N <sub>2</sub> O	310
HFC-23	75-46-7	CHF <sub>3</sub>	11,700
HFC-32	75-10-5	CH <sub>2</sub> F <sub>2</sub>	650
HFC-41	593-53-3	CH <sub>3</sub> F	150
HFC-125	354-33-6	C <sub>2</sub> HF <sub>5</sub>	2,800
HFC-134	359-35-3	C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>	1,000
HFC-134a	811-97-2	CH <sub>2</sub> FCF <sub>3</sub>	1,300
HFC-143	430-66-0	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	300
HFC-143a	420-46-2	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	3,800
HFC-152	624-72-6	CH <sub>2</sub> FCH <sub>2</sub> F	53
HFC-152a	75-37-6	CH <sub>3</sub> CHF <sub>2</sub>	140
HFC-161	353-36-6	CH <sub>3</sub> CH <sub>2</sub> F	12
HFC-227ea	431-89-0	C <sub>3</sub> HF <sub>7</sub>	2,900
HFC-236cb	677-56-5	CH <sub>2</sub> FCF <sub>2</sub> CF <sub>3</sub>	1,340
HFC-236ea	431-63-0	CHF <sub>2</sub> CHFCF <sub>3</sub>	1,370
HFC-236fa	690-39-1	C <sub>3</sub> H <sub>2</sub> F <sub>6</sub>	6,300
HFC-245ca	679-86-7	C <sub>3</sub> H <sub>3</sub> F <sub>5</sub>	560
HFC-245fa	460-73-1	CHF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>	1,030
HFC-365mfc	406-58-6	CH <sub>3</sub> CF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>	794
HFC-43-10mee	138495-42-8	CF <sub>3</sub> CFHCFHCF <sub>2</sub> CF <sub>3</sub>	1,300
Sulfur hexafluoride	2551-62-4	SF <sub>6</sub>	23,900
Trifluoromethyl sulphur pentafluoride	373-80-8	SF <sub>5</sub> CF <sub>3</sub>	17,700
Nitrogen trifluoride	7783-54-2	NF <sub>3</sub>	17,200
PFC-14 (Perfluoromethane)	75-73-0	CF <sub>4</sub>	6,500
PFC-116 (Perfluoroethane)	76-16-4	C <sub>2</sub> F <sub>6</sub>	9,200
PFC-218 (Perfluoropropane)	76-19-7	C <sub>3</sub> F <sub>8</sub>	7,000
Perfluorocyclopropane	931-91-9	c-C <sub>3</sub> F <sub>6</sub>	17,340
PFC-3-1-10 (Perfluorobutane)	355-25-9	C <sub>4</sub> F <sub>10</sub>	7,000

Subpart A-General Provisions

**Table A-1 of Subpart A—Global Warming Potentials (100-Year Time Horizon)**

Name	CAS #	Chemical formula	Global warming potential (100 yr.)
Perfluorocyclobutane	115-25-3	c-C <sub>4</sub> F <sub>8</sub>	8,700
PFC-4-1-12 (Perfluoropentane)	678-26-2	C <sub>5</sub> F <sub>12</sub>	7,500
PFC-5-1-14 (Perfluorohexane)	355-42-0	C <sub>6</sub> F <sub>14</sub>	7,400
PFC-9-1-18	306-94-5	C <sub>10</sub> F <sub>18</sub>	7,500
HCFE-235da2 (Isoflurane)	26675-46-7	CHF <sub>2</sub> OCHClCF <sub>3</sub>	350
HFE-43-10pccc (H-Galden 1040x)	E1730133	CHF <sub>2</sub> OCF <sub>2</sub> OC <sub>2</sub> F <sub>4</sub> OCHF <sub>2</sub>	1,870
HFE-125	3822-68-2	CHF <sub>2</sub> OCF <sub>3</sub>	14,900
HFE-134	1691-17-4	CHF <sub>2</sub> OCHF <sub>2</sub>	6,320
HFE-143a	421-14-7	CH <sub>3</sub> OCF <sub>3</sub>	756
HFE-227ea	2356-62-9	CF <sub>3</sub> CHFOCF <sub>3</sub>	1,540
HFE-236ca12 (HG-10)	78522-47-1	CHF <sub>2</sub> OCF <sub>2</sub> OCHF <sub>2</sub>	2,800
HFE-236ea2 (Desflurane)	57041-67-5	CHF <sub>2</sub> OCHF <sub>2</sub> CF <sub>3</sub>	989
HFE-236fa	20193-67-3	CF <sub>3</sub> CH <sub>2</sub> OCF <sub>3</sub>	487
HFE-245cb2	22410-44-2	CH <sub>3</sub> OCF <sub>2</sub> CF <sub>3</sub>	708
HFE-245fa1	84011-15-4	CHF <sub>2</sub> CH <sub>2</sub> OCF <sub>3</sub>	286
HFE-245fa2	1885-48-9	CHF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>	659
HFE-254cb2	425-88-7	CH <sub>3</sub> OCF <sub>2</sub> CHF <sub>2</sub>	359
HFE-263fb2	460-43-5	CF <sub>3</sub> CH <sub>2</sub> OCH <sub>3</sub>	11
HFE-329mcc2	67490-36-2	CF <sub>3</sub> CF <sub>2</sub> OCF <sub>2</sub> CHF <sub>2</sub>	919
HFE-338mcf2	156053-88-2	CF <sub>3</sub> CF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>	552
HFE-338pcc13 (HG-01)	188690-78-0	CHF <sub>2</sub> OCF <sub>2</sub> CF <sub>2</sub> OCHF <sub>2</sub>	1,500
HFE-347mcc3	28523-86-6	CH <sub>3</sub> OCF <sub>2</sub> CF <sub>2</sub> CF <sub>3</sub>	575
HFE-347mcf2	E1730135	CF <sub>3</sub> CF <sub>2</sub> OCH <sub>2</sub> CHF <sub>2</sub>	374
HFE-347pcf2	406-78-0	CHF <sub>2</sub> CF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>	580
HFE-356mec3	382-34-3	CH <sub>3</sub> OCF <sub>2</sub> CHFCF <sub>3</sub>	101
HFE-356pcc3	160620-20-2	CH <sub>3</sub> OCF <sub>2</sub> CF <sub>2</sub> CHF <sub>2</sub>	110
HFE-356pcf2	E1730137	CHF <sub>2</sub> CH <sub>2</sub> OCF <sub>2</sub> CHF <sub>2</sub>	265

Subpart A-General Provisions

**Table A-1 of Subpart A—Global Warming Potentials (100-Year Time Horizon)**

Name	CAS #	Chemical formula	Global warming potential (100 yr.)
HFE-356pcf3	35042-99-0	CHF <sub>2</sub> OCH <sub>2</sub> CF <sub>2</sub> CHF <sub>2</sub>	502
HFE-365mcf3	378-16-5	CF <sub>3</sub> CF <sub>2</sub> CH <sub>2</sub> OCH <sub>3</sub>	11
HFE-374pc2	512-51-6	CH <sub>3</sub> CH <sub>2</sub> OCF <sub>2</sub> CHF <sub>2</sub>	557
HFE-449sl (HFE-7100)	163702-07-6	C <sub>4</sub> F <sub>9</sub> OCH <sub>3</sub>	297
Chemical blend	163702-08-7	(CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OCH <sub>3</sub>	
HFE-569sf2 (HFE-7200)	163702-05-4	C <sub>4</sub> F <sub>9</sub> OC <sub>2</sub> H <sub>5</sub>	59
Chemical blend	163702-06-5	(CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> OC <sub>2</sub> H <sub>5</sub>	
Sevoflurane	28523-86-6	CH <sub>2</sub> FOCH(CF <sub>3</sub> ) <sub>2</sub>	345
HFE-356mm1	13171-18-1	(CF <sub>3</sub> ) <sub>2</sub> CHOCH <sub>3</sub>	27
HFE-338mmz1	26103-08-2	CHF <sub>2</sub> OCH(CF <sub>3</sub> ) <sub>2</sub>	380
(Octafluorotetramethylene)hydroxymethyl group	NA	X-(CF <sub>2</sub> ) <sub>4</sub> CH(OH)-X	73
HFE-347mmy1	22052-84-2	CH <sub>3</sub> OCF(CF <sub>3</sub> ) <sub>2</sub>	343
Bis(trifluoromethyl)-methanol	920-66-1	(CF <sub>3</sub> ) <sub>2</sub> CHOH	195
2,2,3,3,3-pentafluoropropanol	422-05-9	CF <sub>3</sub> CF <sub>2</sub> CH <sub>2</sub> OH	42
PFPMIE	NA	CF <sub>3</sub> OCF(CF <sub>3</sub> )CF <sub>2</sub> OCF <sub>2</sub> OCF <sub>3</sub>	10,300

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2 **Table A-2 of Subpart A—Units of Measure Conversions.**

To convert from	To	Multiply by
Kilograms (kg)	Pounds (lbs)	2.20462
Pounds (lbs)	Kilograms (kg)	0.45359
Pounds (lbs)	Metric tons	4.53592 x 10 <sup>-4</sup>
Short tons	Pounds (lbs)	2,000
Short tons	Metric tons	0.90718
Metric tons	Short tons	1.10231
Metric tons	Kilograms (kg)	1,000
Cubic meters (m <sup>3</sup> )	Cubic feet (ft <sup>3</sup> )	35.31467
Cubic feet (ft <sup>3</sup> )	Cubic meters (m <sup>3</sup> )	0.028317

Subpart A-General Provisions

To convert from	To	Multiply by
Gallons (liquid, US)	Liters (l)	3.78541
Liters (l)	Gallons (liquid, US)	0.26417
Barrels of Liquid Fuel (bbl)	Cubic meters (m <sup>3</sup> )	0.15891
Cubic meters (m <sup>3</sup> )	Barrels of Liquid Fuel (bbl)	6.289
Barrels of Liquid Fuel (bbl)	Gallons (liquid, US)	42
Gallons (liquid, US)	Barrels of Liquid Fuel (bbl)	0.023810
Gallons (liquid, US)	Cubic meters (m <sup>3</sup> )	0.0037854
Liters (l)	Cubic meters (m <sup>3</sup> )	0.001
Feet (ft)	Meters (m)	0.3048
Meters (m)	Feet (ft)	3.28084
Miles (mi)	Kilometers (km)	1.60934
Kilometers (km)	Miles (mi)	0.62137
Square feet (ft <sup>2</sup> )	Acres	2.29568 x 10 <sup>-5</sup>
Square meters (m <sup>2</sup> )	Acres	2.47105 x 10 <sup>-4</sup>
Square miles (mi <sup>2</sup> )	Square kilometers (km <sup>2</sup> )	2.58999
Degrees Celsius (°C)	Degrees Fahrenheit (°F)	°C = (5/9) x (°F-32)
Degrees Fahrenheit (°F)	Degrees Celsius (°C)	°F = (9/5) x °C + 32
Degrees Celsius (°C)	Kelvin (K)	K = °C + 273.15
Kelvin (K)	Degrees Rankine (°R)	1.8
Joules	Btu	9.47817 x 10 <sup>-4</sup>
Btu	MMBtu	1 x 10 <sup>-6</sup>
Pascals (Pa)	Inches of Mercury (in Hg)	2.95334 x 10 <sup>-4</sup>
Inches of Mercury (inHg)	Pounds per square inch (psi)	0.49110
Pounds per square inch (psi)	Inches of Mercury (in Hg)	2.03625

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Subpart A-General Provisions

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<b>Table A-3 of Subpart A—Source Category List for §98.2(a)(1)Source Categories<sup>a</sup> Applicable in 2010 and Future Years</b>
Electricity generation units that report CO <sub>2</sub> mass emissions year round through 40 CFR part 75 (subpart D)
Adipic acid production (subpart E)
Aluminum production (subpart F)
Ammonia manufacturing (subpart G)
Cement production (subpart H)
HCFC 22 production (subpart O)
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)
Lime manufacturing (subpart S)
Nitric acid production (subpart V)
Petrochemical production (subpart X)
Petroleum refineries (subpart Y)
Phosphoric acid production (subpart Z)
Silicon carbide production (subpart BB)
Soda ash production (subpart CC)
Titanium dioxide production (subpart EE)
Municipal solid waste landfills that generate CH <sub>4</sub> in amounts equivalent to 25,000 metric tons CO <sub>2</sub> e or more per year, as determined according to subpart HH of this part
Manure management systems with combined CH <sub>4</sub> and N <sub>2</sub> O emissions in amounts equivalent to 25,000 metric tons CO <sub>2</sub> e or more per year, as determined according to subpart JJ of this part.
<b>Additional Source Categories<sup>a</sup> Applicable in 2011 and Future Years</b>
Underground coal mines that are subject to quarterly or more frequent sampling by Mine Safety and Health Administration (MSHA) of ventilation systems (subpart FF).

3 <sup>a</sup> Source categories are defined in each applicable subpart.

Subpart A-General Provisions

1 **Table A-4 of Subpart A—Source Category List for §98.2(a)(2)**

<b>Source Categories<sup>a</sup> Applicable in 2010 and Future Years</b>
Ferroalloy production (subpart K)
Glass production (subpart N)
Hydrogen production (subpart P)
Iron and steel production (subpart Q)
Lead production (subpart R)
Pulp and paper manufacturing (subpart AA)
Zinc production (subpart GG)
<b>Additional Source Categories<sup>a</sup> Applicable in 2011 and Future Years</b>
Magnesium production (subpart T)
Industrial wastewater treatment (subpart II)
Industrial waste landfills (subpart TT)
Any other source category added after November 1, 2009

2 <sup>a</sup> Source categories are defined in each applicable subpart.

Subpart A-General Provisions

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TABLE A-5 TO SUBPART A—SUPPLIER CATEGORY LIST FOR § 98.2(a)(4)
Supplier Categories <sup>a</sup> -Applicable in 2010 and Future Years
Coal-to-liquids suppliers (subpart LL):
(A) All producers of coal to liquid products.
(B) Importers of an annual quantity of coal to liquid products that is equivalent to 25,000 metric tons CO <sub>2</sub> e or more.
(C) Exporters of an annual quantity of coal to liquid products that is equivalent to 25,000 metric tons CO <sub>2</sub> e or more.
Petroleum product suppliers (subpart MM):
(A) All petroleum refineries that distill crude oil.
(B) Importers of an annual quantity of petroleum products that is equivalent to 25,000 metric tons CO <sub>2</sub> e or more.
(C) Exporters of an annual quantity of petroleum products that is equivalent to 25,000 metric tons CO <sub>2</sub> e or more.
Natural gas and natural gas liquids suppliers (subpart NN):
(A) All fractionators.
(B) All local natural gas distribution companies.
Industrial greenhouse gas suppliers (subpart OO):
(A) All producers of industrial greenhouse gases.
(B) Importers of industrial greenhouse gases with annual bulk imports of N <sub>2</sub> O, fluorinated GHG, and CO <sub>2</sub> that in combination are equivalent 25,000 metric tons CO <sub>2</sub> e or more.
(C) Exporters of industrial greenhouse gases with annual bulk exports of N <sub>2</sub> O, fluorinated GHG, and CO <sub>2</sub> that in combination are equivalent to 25,000 metric tons CO <sub>2</sub> e or more.
Carbon dioxide suppliers (subpart PP):
(A) All producers of CO <sub>2</sub> .
(B) Importers of CO <sub>2</sub> with annual bulk imports of N <sub>2</sub> O, fluorinated GHG, and CO <sub>2</sub> that in combination are equivalent to 25,000 metric tons CO <sub>2</sub> e or more.
(C) Exporters of CO <sub>2</sub> with annual bulk exports of N <sub>2</sub> O, fluorinated GHG, and CO <sub>2</sub> that in combination are equivalent to 25,000 metric tons CO <sub>2</sub> e or more.
Additional Supplier Categories Applicable <sup>a</sup> in 2011 and Future Years
(Reserved)

2 <sup>a</sup> Suppliers are defined in each applicable subpart.