

**REGULATION 12  
MISCELLANEOUS STANDARDS OF PERFORMANCE  
RULE 16  
PETROLEUM REFINING GREENHOUSE GAS EMISSIONS LIMITS  
INDEX**

**12-16-100 GENERAL**

- 12-16-101 Description
- 12-16-102 Exemption, Small Refineries

**12-16-200 DEFINITIONS**

- 12-16-201 Affected Facility
- 12-16-202 Annual Emissions Inventory
- 12-16-203 Adjusted GHG Emissions
- 12-16-204 Baseline Period
- 12-16-205 Baseline Carbon Intensity
- 12-16-206 Carbon Intensity
- 12-16-207 Emissions Inventory
- 12-16-208 Determination of Carbon Intensity Neutrality
- 12-16-209 Greenhouse Gases (GHGs)
- 12-16-210 Permit to Operate
- 12-16-211 Permitted Future-Operational Source
- 12-16-212 Petroleum Refinery
- 12-16-213 Reported GHG Emissions
- 12-16-214 Source

**12-16-300 STANDARDS**

- 12-16-301 Green House Gas Emissions Limits
- 12-16-302 Adjustment of Reported GHG Emissions
- 12-16-303 Exceedance of Emissions Limits
- 12-16-304 Determination of Carbon Intensity Neutrality

**12-16-400 ADMINISTRATIVE REQUIREMENTS**

- 12-16-401 Determination and Reporting of Cause of Exceedance of Emissions Limits
- 12-16-402 Quarterly Reporting
- 12-16-403 Designation of Confidential Information

**REGULATION 12**  
**MISCELLANEOUS STANDARDS OF PERFORMANCE**  
**RULE 16**  
**PETROLEUM REFINING GREENHOUSE GAS EMISSIONS LIMITS**

(Adopted June XX, 2017)

**12-16-100 GENERAL**

**12-16-101 Description:** The purpose of this rule is to limit GHG emissions from petroleum refineries and associated support facilities.

**12-16-102 Exemption, Small Refineries:** This rule shall not apply to any refinery that is limited by an Air District Permit to Operate to a total crude oil throughput or total crude oil processing capacity of 5,000 barrels per day or less.

**12-16-200 DEFINITIONS**

**12-16-201 Affected Facility:** A facility subject to the requirements of this Rule. Affected Facilities are identified in Table 12-16-301.

**12-16-202 Annual Emissions Inventory:** An Emissions Inventory as defined in Section 12-16-207 at a Petroleum Refinery covering a calendar year period.

**12-16-203 Adjusted GHG Emissions:** The Reported GHG Emissions Level as modified by the APCO in accordance with Section 12-16-302 for purposes of determining whether an Emissions Limit has been exceeded.

**12-16-204 Baseline Period:** Five-year period of calendar years 2011, 2012, 2013, 2014, and 2015, based on GHG emissions data available at the time of rule adoption.

**12-16-205 Baseline Carbon Intensity:** The carbon intensity of a refinery during the Baseline Period.

**12-16-206 Carbon Intensity:** Carbon Intensity of refinery processing equals the refinery GHG Emissions adjusted to account for imported electricity, hydrogen and steam, divided by the sum (in thousands of barrels) of annual volume of crude processed plus annual volume of other non-crude oil feedstocks processed.

**12-16-207 Emissions Inventory:** As defined in Regulation 12, Rule 15, Section 206.

**12-16-208 Determination of Carbon Intensity Neutrality:** A determination made by the APCO pursuant to Section 12-16-304 that there has been no significant increase in carbon intensity considering the operations of the Affected Facility as a whole relative to the baseline carbon intensity.

**12-16-209 Greenhouse Gases (GHGs):** The air pollutant that is defined in 40 CFR § 86.1818-12(a), which is a single air pollutant made up of a combination of the following six constituents: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For the purposes of this rule, GHG emissions should be calculated in manner consistent with California Air Resources Board requirements as contained in §95113 of the Mandatory Greenhouse Gas Emissions Reporting Rule.

**12-16-210 Permit to Operate:** A written authorization obtained pursuant to Regulation 2, Rule 1, Section 301.

**12-16-211 Permitted Future-Operational Source:** A source at an Affected Facility that is authorized to operate through a District Authority to Construct issued prior to January 1, 2017, and that had not achieved full capacity, commercial operation by that date.

**12-16-212 Petroleum Refinery:** An establishment that is located on one or more contiguous or adjacent properties that processes crude oil to produce more usable products such as gasoline, diesel fuel, aviation fuel, lubricating oils, asphalt or petrochemical feedstocks. Petroleum Refinery processes include separation processes (e.g., atmospheric or vacuum distillation, and light ends recovery), petroleum conversion processes (e.g., cracking, reforming, alkylation, polymerization, isomerization, coking, and visbreaking), petroleum treating processes (e.g., hydrodesulfurization, hydrotreating, chemical sweetening, acid gas removal, and deasphalting), feedstock and product handling (e.g., storage, crude oil blending, non-crude oil feedstock blending, product blending, loading, and unloading), and auxiliary facilities (e.g., boilers, waste water treatment, hydrogen production, sulfur recovery plant, cooling towers, blowdown systems, compressor engines, and power plants).

**12-16-213 Reported GHG Emissions:** The amount of annual GHG emissions reported pursuant to Regulation 12, Rule 15, Section 401.

**12-16-214 Source:** As defined in Regulation 2, Rule 1, Section 221.

**12-16-300 STANDARDS**

**12-16-301 Greenhouse Gas Emissions Limit:** Beginning January 1, 2018, the Emissions Limits described in Table 12-16-301 below for each Affected Facility shall not be exceeded during any calendar year:

**Table 12-16-301: GHG Emission Limits**

<u>Facility</u>	<u>2011–2015 Baseline Average</u> (metric tons/year)	<u>Operating Variation Plus 3%</u> (metric tons/year)	<u>Emissions Limit</u> (metric tons/year)
Chevron Refinery A-0010	4.33 M	599 K	4.93 M
Shell Refinery A-0011	4.12 M	440 K	4.56 M
Phillips 66 Refinery A-0016	1.36 M	281 K	1.64 M
Tesoro Refinery B-2758/2759	2.27 M	566 K	2.83 M
Valero Refinery, B-2626 & Asphalt Plant, B-3193	2.77 M	409 K	3.18 M
Martinez Cogen LP A-1820	407 K	49.4 K	456 K
Air Liquide H2 Plant B7419	787 K	270 K	1.06 M
Air Products H2 Plant B-0295	240 K	93.6 K	333 K

M = Millions, K = Thousands

**12-16-302 Adjustment of Reported GHG Emissions:** The APCO shall determine Adjusted GHG Emissions as follows:

**302.1** The APCO shall subtract from Reported GHG Emissions the amount of emissions attributable to sources that operate solely to comply with District, State, or federal air pollution control regulations and that operate pursuant to a District Authority to Construct issued after the date of adoption of this Rule.

**302.2** If the APCO makes a Determination of Carbon Intensity Neutrality pursuant to Section 12-16-304, the APCO shall subtract from Reported GHG Emissions the amount of emissions within permitted limits attributable to increases in utilization of any Permitted Future Operational Source.

**302.3** Within 30 days of receipt of Reported GHG Emissions, the APCO shall make available for review a proposed Adjusted GHG Emissions determination and an accompanying explanation. If the APCO determines that no adjustments are appropriate, then the APCO will so indicate in the proposed determination. The APCO shall send electronic notification of this determination to each Affected Facility and to persons who have requested notification. Affected Facilities and members of the public shall have 14 days from the date of notification to submit comments on the proposed determination. The APCO may finalize the Adjusted GHG Emissions determination 21 days after the notification described in the preceding sentence and after considering any comments received. The APCO shall publish the Adjusted GHG Emissions determination on the District website and provide electronic notification to each Affected Facility and persons who received notice of the proposed determination.

**12-16-303 Exceedance of Emissions Limit:** If the Adjusted GHG Emissions for an Affected Facility exceed the Emissions Limit, the owner/operator of the Affected Facility shall investigate to determine the primary cause and contributing factors for the exceedance in accordance with

Section 12-16-401. An exceedance shall be a violation of this Rule for each day of the calendar year for the Reported GHG Emissions period, unless reviewed by the APCO and determined to be due to conditions:

**303.1** For which the required corrective action would result in adverse air quality impacts, locally or otherwise, that would exceed the air quality benefit of compliance with the emissions limit; or

**303.2** That could not be feasibly be addressed prior to the next scheduled major maintenance shutdown.

**12-16-304 Determination of Carbon Intensity Neutrality:** The owner/operator of an Affected Facility that has experienced increases in GHG emissions due to Permitted Future-Operational Sources that may affect compliance with this Rule may request that the APCO make a Determination of Carbon Intensity Neutrality for purposes of Section 12-16-302.2. Such a request must include all data required to make the determination. Upon receiving such a request, the APCO shall make a determination as follows:

**304.1** Calculate Baseline Carbon Intensity for the refinery that is representative of the refinery's operation during the Baseline Period.

**304.2** Determine normal variation in carbon intensity during the baseline period.

**304.3** The calculation of Baseline Carbon Intensity and normal variation of carbon intensity shall exclude years during the baseline period where the refinery crude input was less than 70% of capacity.

**304.4** Calculate the overall carbon intensity of the refinery during the year in question and determine if the carbon intensity of the year in question is within the normal variation of carbon intensity during the Baseline Period.

**304.5** The proposed Adjusted GHG Emissions Determination made available pursuant to Section 12-16-302.3 shall include an explanation of any analysis conducted by the APCO pursuant to this Section.

**12-16-400 ADMINISTRATIVE REQUIREMENTS**

**12-16-401 Determination and Reporting of Cause of Exceedance of Emissions Limits:** Within 60 days of notification by the District that an Emissions Limit has been exceeded, the owner or operator of a facility subject to this Rule shall submit a report to the District that includes the following:

**401.1** A description of the primary cause and contributing factors for the exceedance.

**401.2** Prevention measures that will be implemented to prevent recurrence of an exceedance and a justification for rejecting any measures that were considered but will not be implemented.

**401.3** If appropriate, an explanation of why the exceedance meets the criteria of Section 12-16-303.1 or 303.2.

**12-16-402 Quarterly Reporting:** Beginning May 1, 2018, and every three months thereafter, each Affected Facility shall submit to the APCO a quarterly report summarizing GHG emissions from the Affected Facility for the previous quarter. For example, the May 1, 2018 report shall summarize GHG emissions for the period from January 1 to March 31, 2018.

**12-15-403 Designation of Confidential Information:** When submitting any documents or records required by this rule, the Affected Facility shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. If a document is submitted that contains information designated confidential in accordance with this section, the owner/operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted.