# Note: This is NOT the full document, but only the pages highlighted in GREEN below.

# DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

**Air Quality Control Commission** 

## **REGULATION NUMBER 7**

## CONTROL OF OZONE VIA OZONE PRECURSORS AND CONTROL OF HYDROCARBONS VIA OIL AND GAS EMISSIONS (EMISSIONS OF VOLATILE ORGANIC COMPOUNDS AND NITROGEN OXIDES)

## 5 CCR 1001-9

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

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Pursuant to Colorado Revised Statutes Section 24-4-103 (12.5), materials incorporated by reference are available for public inspection during normal business hours, or copies may be obtained at a reasonable cost from the Air Quality Control Commission (the Commission), 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530. The material incorporated by reference is also available through the United States Government Printing Office, online at <u>www.govinfo.gov</u>. Materials incorporated by reference are those editions in existence as of the date indicated and do not include any later amendments.

- I.B.2.h Beginning February 14, 2022, the owner or operator must conduct performance tests for each enclosed combustion device for which Regulation Number 7, Part D, Sections I.D., II.B.3.b., II.C.1., II.D., or II.F. requires the device to achieve at least 95% control efficiency for hydrocarbons. A performance test that does not demonstrate that an enclosed combustion device is achieving at least 95% control efficiency for hydrocarbons is considered a failing test.
  - II.B.2.h.(i) Performance test requirements.
    - II.B.2.h.(i)(A) Performance tests are not required for enclosed combustion devices serving solely as limited-use control devices during vapor recovery unit downtime.
    - II.B.2.h.(i)(B) Owners or operators must test all enclosed combustion devices used to control the same piece of equipment or operation (e.g., a bank of enclosed combustion devices controlling a storage tank) over the course of the same testing event, which may occur over multiple working days.
    - II.B.2.h.(i)(C) Performance tests must be conducted in accordance with a Division-approved test protocol.
    - II.B.2.h.(i)(D) With enough time to calibrate and ensure proper reading from the flow meter prior to each performance test conducted under Section II.B.2.h. and continuing through the performance test, owner or operators must install and operate a flow meter on the inlet to each enclosed combustion device to be tested, unless not required by the Division-approved performance test protocol. Temporary flow meters may be used to meet this requirement.
    - II.B.2.h.(i)(E) For the calendar year of a failing performance test, owners or operators must calculate enclosed combustion device emissions (or the emissions for the source controlled) pursuant to Sections II.G. and V. with the results of the failed test until the enclosed combustion device is back in compliance as confirmed by the passing retest under Section II.B.2.h.(i)(G).
    - II.B.2.h.(i)(F) Owners or operators of enclosed combustion devices that fail a performance test must, within thirty (30) days, follow the manufacturer's repair instructions, if available, or best combustion engineering practices to return the device to compliant operation or shut-in all equipment or operations controlled by the enclosed combustion device.

- II.B.2.h.(i)(G) Owners or operators must retest the enclosed combustion device within ninety (90) days of corrective action in response to a failed test or within thirty (30) days of return to operation if the equipment or operations controlled by the enclosed combustion device were shutin as a response to a failed test. Division approval of the testing protocol is not required for a retest where.
  - II.B.2.h.(i)(G)(1) The owner or operator is following the same test protocol as the original, failed test and
  - II.B.2.h.(i)(G)(2) Conditions have not materially changed such that a new test protocol would be required.
- II.B.2.h.(i)(H) As an alternative to Section II.B.2.h.(i)(G), the owner or operator may replace the failing enclosed combustion device with a different enclosed combustion device and test the replacement enclosed combustion device upon commencement of operation. The owner or operator does not have to test the replacement enclosed combustion device if the device is newly manufactured (has never been in operation anywhere else) and has been tested by the manufacturer in accordance with the requirements of 40 CFR Part 60, Subpart OOOOa, Section 60.5413a(d) (June 3, 2016).
- II.B.2.h.(ii) Initial performance test schedule.
  - II.B.2.h.(ii)(A) Enclosed combustion devices that commenced operation before December 31, 2021, must be tested within the schedule in Table 1, unless the Division approves an alternative testing schedule.

Table 1 – Enclosed Combustion Device Inspections						
	Compliance deadlines					
Location of enclosed	October 31, 2023	October 31, 2024	May 1, 2025	May 1, 2026	May 1, 2027	May 1, 2028
	Percentage (%) of owner or operator's enclosed combustion devices that must be tested					
Within a DI community	At least 15%	At least 40%	At least 70%	100%	NA	NA
Within the 8-hour ozone control area and northern Weld County	At least 10%	At least 30%	At least 50%	At least 80%	100%	NA
Outside the 8-hour ozone control area and northern Weld County	At least 5%	At least 15%	At least 30%	At least 50%	At least 75%	100%

- II.B.2.h.(ii)(B) A performance test conducted in accordance with Division-approved test protocol between January 1, 2020, and October 31, 2023, will satisfy the initial performance testing requirements in Section II.B.2.h.(ii)(A).
- II.B.2.h.(ii)(C) Enclosed combustion devices that commence operation on or after December 31, 2021, must be tested within two (2) years after commencement of operation, unless the enclosed combustion device is newly manufactured (has never been in operation) and has been tested by the manufacturer in accordance with the requirements of 40 CFR Part 60, Subpart OOOOa, Section 60.5413a(d) (June 3, 2016), in which case the enclosed combustion device must be tested within five (5) years after commencement of operation.
- II.B.2.h.(ii)(D) No enclosed combustion device located in the 8-hour ozone control area and northern Weld County or in a disproportionately impacted community can operate for more than five (5) years without a performance test.
- II.B.2.h.(ii)(E) No enclosed combustion device located outside the 8hour ozone control area and northern Weld County but not within a disproportionately impacted community can operate for more than ten (10) years without a performance test.
- II.B.2.h.(ii)(F) Owners or operators do not have to start up a source solely to perform a performance test on the enclosed combustion device if gas flow to the device is from a source or equipment that has been shut-in for more than thirty (30) consecutive days; however, a performance test is required within thirty (30) days of the enclosed combustion device once again receiving gas flow.

# II.B.2.h.(iii) Notification.

No later than July 31, 2022, owners or operators of enclosed combustion devices subject to Section II.B.2.h.(ii) must submit a notification to the Division with the following information.

- II.B.2.h.(iii)(A) A list of all enclosed combustion devices that commenced operation before December 31, 2021, with associated facility name and location, AIRS ID (if assigned), manufacturer model, serial number (if available, or other unique identifier), and identification of equipment controlled by the enclosed combustion device.
- II.B.2.h.(iii)(B) The year in which each enclosed combustion device will be tested to meet the compliance schedule in Table 1.

- II.B.2.h.(iii)(C) A list of enclosed combustion devices where the initial performance test requirement is satisfied pursuant to Section II.B.2.h.(ii)(B), including the date and results of the test.
- II.B.2.h.(iv) Subsequent performance tests.
  - II.B.2.h.(iv)(A) Enclosed combustion devices located in the 8-hour ozone control area and northern Weld County must be tested within five (5) years following the previous performance test, unless the enclosed combustion device is newly manufactured (has never been in operation) and has been tested by the manufacturer in accordance with the requirements of 40 CFR Part 60, Subpart OOOOa, Section 60.5413a(d) (June 3, 2016), in which case the enclosed combustion device must be tested within eight (8) years following the previous performance test.
  - II.B.2.h.(iv)(B) Enclosed combustion devices located within a disproportionately impacted community must be tested within five (5) years following the previous performance test, unless the enclosed combustion device is newly manufactured (has never been in operation) and has been tested by the manufacturer in accordance with the requirements of 40 CFR Part 60, Subpart OOOOa, Section 60.5413a(d) (June 3, 2016), in which case the enclosed combustion device must be tested within eight (8) years following the previous performance test.
  - II.B.2.h.(iv)(C) Enclosed combustion devices located outside the 8-hour ozone control area and northern Weld County and not within a disproportionately impacted community must be tested within ten (10) years following the previous performance test.
- II.B.2.i. Recordkeeping.

Except as specified in Section II.B.2.i.(ix), the owner or operator must maintain records for a period of five (5) years and make them available to the Division upon request, including

- II.B.2.i.(i) Notifications submitted in accordance with Section II.B.2.h.(iii).
- II.B.2.i.(ii) Records of the make, model, serial number or other unique identifier, and AIRS ID (if assigned) of each enclosed combustion device; associated facility name and location; and the range of gas flow at which the combustion device is designed to operate.
- II.B.2.i.(iii) Records of visual inspections conducted pursuant to Section II.B.2.f., including the time and date of each inspection and a description of any problems observed, description and date of any corrective action(s) taken, and name of employee or third party performing corrective action(s).

- II.B.2.i.(iv) Records of the date and result of any EPA Method 22 test or investigation.
- II.B.2.i.(v) Records of the date and duration of any period where the air pollution control equipment is not operating.
- II.B.2.i.(vi) Monthly records of the total hours the vapor recovery unit is not operating, the total throughput volume, and total throughput volume during the time the vapor recovery unit is not operating.
- II.B.2.i.(vii) Records of inlet gas flow rate, as required by Section II.B.2.f.(ii)(G).
- II.B.2.i.(viii) Records supporting the delay of any performance test pursuant to Section II.B.2.h.(ii)(F).
- II.B.2.i.(ix) Records of performance tests must be maintained for the life of the equipment that the enclosed combustion device is used to control (even if ownership or control of the device is transferred), including manufacturer model and serial number(s) of devices tested; the date of the test; a copy of the test protocol followed; a certification by a responsible official that the performance test was conducted in accordance with a Division-approved test protocol; the enclosed combustion device parameters required by the test protocol; documentation of the methods and results of the test, including whether the device passed or failed and the tested control efficiency; and the date and description of any actions taken in response to a failed test.
- II.B.2.i.(x) Records of flow meter calibration and maintenance conducted pursuant to Section II.B.2.g.(ii), including manufacturer specifications and schedule if available.
- II.B.2.j. Reporting. The owner or operator must submit the following information to the Division.
  - II.B.2.j.(i) By no later than the final day of the month after the failing test result, the owner or operator must submit a notification of the failing test, including: AIRS ID, serial number or other unique identifier, and equipment or operation controlled; the date of test; the results of the test; monthly methane and VOC emission calculations using the test results for the calendar year of the test; monthly throughput for the calendar year of the test; the action to return the enclosed combustion device to proper operation (or whether operations were shut-in), including the timing thereof; and the proposed date of the retest.
  - II.B.2.j.(ii) On the same date as the annual emissions inventory report in Part D, Section V., the owner or operator must submit the date of each performance test and the results of the test (i.e., pass/fail and tested control efficiency).

- II.B.2.j.(iii) By July 31 of each year (beginning 2023 and ending 2027 or upon completion of the initial performance testing schedule set forth in Table 1), owners or operators must submit an update to the notification provided under Section II.B.2.h.(iii) documenting changes to the list specified in Section II.B.2.h.(iii)(A) (e.g., an enclosed combustion device moved to a different facility (including transfer to another operator) or controlling more or less equipment or operations than specified) and changes to the performance testing schedule provided pursuant to Section II.B.2.h.(iii)(B).
- II.B.3. Requirements for compressor seals and open-ended valves or lines
  - II.B.3.a. Beginning January 1, 2015, each open-ended valve or line at well production facilities and natural gas compressor stations must be equipped with a cap, blind flange, plug, or a second valve that seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirement to seal the open end of the valve or line. Alternatively, an open-ended valve or line may be treated as if it is a "component" as defined in Section II.A.7., and may be monitored under the provisions of Section II.E.
  - II.B.3.b. Beginning January 1, 2015, uncontrolled actual hydrocarbon emissions from wet seal fluid degassing systems on wet seal centrifugal compressors must be reduced by at least 95%, unless the centrifugal compressor is subject to 40 CFR Part 60, Subpart OOOO (February 23, 2014) or 40 CFR Part 60, Subpart OOOOa (June 3, 2016) on that date or thereafter.
  - II.B.3.c. Beginning January 1, 2015, the rod packing on any reciprocating compressor located at a natural gas compressor station must be replaced every 26,000 hours of operation or every thirty-six (36) months, unless the reciprocating compressor is subject to the reciprocating compressor emission control, monitoring, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart OOOO (February 23, 2014) or 40 CFR Part 60, Subpart OOOOa (June 3, 2016) on that date or thereafter. The measurement of accumulated hours of operation (26,000) or months elapsed (36) begins on January 1, 2015.
  - II.B.3.d. Beginning February 14, 2022, the rod packing on any reciprocating compressor located at a natural gas processing plant must be replaced every 26,000 hours of operation or every thirty-six (36) months, unless the reciprocating compressor is subject to the reciprocating compressor emission control, monitoring, recordkeeping, and reporting requirements of Section I.J.2., 40 CFR Part 60, Subpart OOOO (February 23, 2014), or 40 CFR Part 60, Subpart OOOOa (June 3, 2016) on that date or thereafter. The measurement of accumulated hours of operation (26,000) or months elapsed (36) begins on February 14, 2022.
- II.B.4. Oil refineries are not subject to Section II.
- II.B.5. Glycol natural gas dehydrators that are subject to an emissions control requirement in a federal maximum achievable control technology ("MACT") standard under 40 CFR Part 63 (December 17, 2006), a Best Available Control Technology ("BACT") limit, or a New Source Performance Standard ("NSPS") under 40 CFR Part 60 (December 17, 2006) are not subject to Section II., except for the leak detection and repair requirements in Section II.E.