

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



GENERAL CONSTRUCTION PERMIT

Oil and Gas Industry Hydrocarbon Liquid Loadout

PERMIT NO: GP07 Version 1

FINAL APPROVAL

Christopher Laplante
Oil and Gas Permitting Supervisor

April 17, 2014
Date Issued

Note: See the Hydrocarbon Liquid Loadout Guidance document (PS Memo 14-02) for further information on definitions and emission calculation guidelines.

I. General Permit Applicability

I.A. Qualified Sources: The owner or operator of any oil and gas industry (exploration and production (E&P), non-E&P, midstream and downstream) operation that can comply with all of the operating conditions described in Section II of this permit and meet all of the requirements in this Section may register for this general permit. This general permit covers the following:

- I.A.1. Hydrocarbon liquid loading operations, including condensate loading, crude oil loading and dual product loading containing commingled hydrocarbon and produced water.
- I.A.2. Combustion devices, vapor recovery units, vapor balance, or other Division approved control equipment used to reduce emissions from loading operations.
- I.A.3. Equipment as described in Conditions I.A.1 and I.A.2 located at a true minor source or synthetic minor source for Operating Permit (OP), New Source Review (NSR), and Maximum Achievable Control Technology (MACT) program applicability.

I.B. Excluded Sources: The following sources may not register for this general permit:

- I.B.1. Equipment located at a major source as defined in Regulation No. 3, Part A, Section I.B.25.
- I.B.2. This general permit applies only to the equipment as described in Section I.A above. Other equipment at the same stationary source must be permitted separately as required by Regulation No. 3, Part B.

II. **Operating Terms and Conditions**

II.A. Emission Limitations

II.A.1. Combined actual controlled emissions of criteria air pollutants from all loading operations that are owned or operated by the same person and co-located at the same stationary source shall not exceed the following limitation: (Reference: Regulation No. 3, Part B, Section II.A.4.)

 Volatile Organic Compounds: 10.0 tons per year

II.A.2. Combined actual controlled emissions of hazardous air pollutant(s) (HAPs) from all equipment at the same stationary source shall not exceed the following limitations: (Reference: Regulation No. 3, Part B, Section II.A.4.)

 Each Individual HAP: 8.0 tons per year

 Total of all HAPs: 20.0 tons per year

II.A.3. A control device may be used to comply with these emission limits.

II.B. General Operating Conditions

II.B.1. This source is subject to the odor requirements of Regulation No. 2. (State only enforceable)

II.B.2. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. (Reference: Regulation No. 1, Section II.A.1. & 4.).

II.B.3. If emissions are routed to a control device, the permittee shall follow the Operating and Maintenance plan specified in Section IV. (Reference: Regulation No. 3, Part B, Section III.I.6.)

II.B.4. This source's hydrocarbon liquid loading operations shall be limited by the emission limits specified in this permit, and all other activities, operational parameters and numbers of equipment as stated in the registration. (Reference: Regulation No. 3, Part B, Section II.A.4.).

II.B.5. Hydrocarbon liquid loading to truck tanks shall be conducted by submerged fill. (Reference: Regulation 3, Part B, III.E)

II.B.6. The owner or operator shall follow loading procedures that minimize the leakage of VOCs to the atmosphere including, but not limited to (Reference: Regulation 3, Part B, III.E):

 II.B.6.a. Hoses, couplings, and valves shall be maintained to prevent dripping, leaking, or other liquid or vapor loss during loading and unloading.

 II.B.6.b. All compartment hatches (including thief hatches) shall be closed and latched at all times when loading operations are not active, except for periods of maintenance, gauging, or safety of personnel and equipment.

 II.B.6.c. The owner or operator shall inspect loading equipment and operations onsite at the time of inspections to monitor compliance with Part II.B.6 (a) and (b) above. The inspections shall occur at least monthly. Each inspection shall be documented in a log available to the Division on request.

II.B.7. All hydrocarbon liquid loading operations, regardless of size, shall be designed, operated and maintained so as to minimize leakage of volatile organic compounds to the atmosphere to the maximum extent practicable. (Reference: Regulation 3, Part B, III.E)

III. Alternative Operating Scenario (AOS)

- III.A. Provided that the emission limits set forth in Section II.A are still met, the permittee may invoke an AOS for the following modifications to an existing loading operation registered under the general permit without modifying the general permit registration:
- III.A.1. Increase in throughput resulting in a facility classification change from true minor to synthetic minor.
 - III.A.2. Addition or replacement of control equipment by different type.
 - III.A.3. Relocation of the loading operation within the same quarter-quarter section, township, and range.
- III.B. The permittee shall record in a log the date and description of any modification made under the provisions of this AOS. This log shall be maintained contemporaneously with any changes made under the AOS (Reference: Regulation No. 3, Part A, Section IV.A.1.)
- III.C. If exercising the AOS, a revised APEN should be submitted by April 30th of the year following the modification(s). The revised APEN shall be accompanied by the appropriate APEN filing fee and a cover letter detailing all such AOS modifications that occurred within the previous calendar year.
- III.D. The following changes are not considered modifications and are not subject to Condition III.C provided that none of the modifications listed in Section III.A occurred within the same calendar year. These changes should be reflected in any revised APEN required by Condition VI.A.1.
- III.D.1. Changes in throughput not resulting in a facility classification change.
 - III.D.2. Routine maintenance and repair.
 - III.D.3. Changes in facility emissions resulting in a facility classification change
 - III.D.4. Replacement of control technology by same type of control technology.

IV. Operating and Maintenance Plan

- IV.A. Flares shall be enclosed, have no visible emissions, and be designed so that an observer can, by means of visual observation from the outside of the enclosed flare, or by other convenient means approved by the Division, determine whether the flare is operating properly.
- IV.B. If a control device is used to comply with the emission limits of this permit the following conditions must be met:
- IV.B.1. Control devices shall be adequately designed, and operated and maintained according to manufacturer specifications to achieve a control efficiency of at least 95%, and to handle reasonably foreseeable fluctuations in emissions of VOCs.
 - IV.B.2. The permittee shall monitor and document the proper operation of the control device. Time intervals between monitoring shall not exceed 14 days. Indications of improper operation for a flare include, but are not limited to, absence of pilot light, malfunction of electronic ignition, and/or presence of smoke. A check box is suitable for recording proper operation. Improper operation of a control device shall be further documented with a description of the problem and its resolution, the date range the control was inoperable, and the loading throughput during the downtime. During control device downtime, emissions shall be considered to be uncontrolled.
 - IV.B.3. The owner or operator of a facility at which vapor balancing is used to control emissions shall:

- IV.B.3.a. Install and operate the vapor collection and return equipment to collect vapors during loading of tank compartments of outbound transport trucks and return these vapors to the stationary source storage tanks.
 - IV.B.3.b. Include devices to prevent the release of vapor from vapor recovery hoses not in use.
 - IV.B.3.c. Use operating procedures to ensure that hydrocarbon liquid cannot be transferred unless the vapor collection equipment is in use.
 - IV.B.3.d. Operate all recovery and disposal equipment at a back pressure less than the pressure relief valve setting of transport vehicles.
 - IV.B.3.e. Inspect thief hatch seals annually for integrity and replace as necessary. Thief hatch covers shall be weighted and properly seated.
 - IV.B.3.f. Inspect pressure relief devices (PRD) annually for proper operation and replace as necessary. PRDs shall be set to release at a pressure that will ensure flashing, working and breathing losses are routed to the control device under normal operating conditions.
 - IV.B.3.g. Document annual inspections of thief hatch seals and PRD with an indication of status, a description of any problems found, and their resolution.
- IV.B.4. Operating and Maintenance plans for alternative control equipment may be proposed to the Division for approval on a case-by-case basis.

V. Recordkeeping Plan

- V.A. Records shall be maintained on-site or at a local field office with stationary source responsibility for Division review. Records may be kept in either electronic format or hard copy provided that they can be promptly supplied to the Division upon its request. All records shall be retained for a period of five years.
- V.B. The following records shall be maintained for this emission point:
- V.B.1. The current version of this general construction permit.
 - V.B.2. The most recently submitted APEN
 - V.B.3. The general permit registration approval letter.
 - V.B.4. Records that clearly demonstrate compliance with the emission limits of this permit. This shall include the most currently available loading throughput records necessary to calculate emissions in accordance with this Condition V.B.4 and documentation of all periods of control device downtime.
 - V.B.4.a. For sources located at a true minor facility, compliance with the emission limits in Section II.A shall be determined by calculating the annual emissions from each emission unit for the calendar year.
 - V.B.4.b. For sources located at a synthetic minor facility, compliance with the emission limits in Section II.A shall be determined by recording the annual emissions from each emission unit on a rolling (12) month total. By the end of each month a new twelve-month total is calculated based on the previous twelve months' data. During the first year of operation, compliance shall be assumed providing that cumulative emissions from all months of operation do not exceed the emission limits in Section II.A.

- V.B.4.c. Records required by Conditions II.B.6.c (General operating conditions), III.B (AOS), IV.B.2 (Control device monitoring) and IV.B.3.g (Annual inspections), as applicable.

VI. General Permit Terms and Administration

VI.A. General Terms

- VI.A.1. A revised APEN shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)
- VI.A.1.a. Annually by April 30th of the year following a significant increase in emissions as follows:
- VI.A.1.a.(i) For VOC, a change in actual emissions of five (5) tons per year or more, above the level reported on the last APEN; or
- VI.A.1.a.(ii) For VOC in ozone nonattainment areas, a change in annual actual emissions of one (1) ton per year or more or five percent, whichever is greater, above the level reported on the last APEN; or
- VI.A.1.a.(iii) For any non-criteria reportable pollutant, if the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN.
- VI.A.1.b. Whenever there is a change in the owner or operator of any facility, process, or activity; or
- VI.A.1.c. As required by the alternative operating scenario allowed by Section III.
- VI.A.1.d. No later than 30 days before the existing APEN expires.
- VI.A.2. Federal regulatory program requirements (i.e. PSD, NANSR or Title V Operating Permit) shall apply to this source at any such time that this source becomes major solely by virtue of a relaxation in any permit condition. Any relaxation that increases the potential to emit above the applicable Federal program threshold will require a full review of the source as though construction had not yet commenced on the source. The source shall not exceed the Federal program threshold until a permit is granted. (Regulation No. 3 Part D).
- VI.A.3. Sources covered by this General Permit are subject to the Common Provisions Regulation Part II, Subpart E, Upset Conditions and Breakdowns. The permittee shall notify the Division of any upset condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the Division's next working day, followed by written notice to the Division explaining the cause of the occurrence and that proper action has been or is being taken to correct the conditions causing said violation and to prevent such excess emission in the future.
- VI.A.4. This permit is granted subject to all rules and regulations of the Colorado Air Quality Control Commission and the Colorado Air Pollution Prevention And Control Act C.R.S. (25-7-101 et seq), to those general and specific terms and conditions included in this document.
- VI.A.5. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
- VI.A.6. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of, a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied ab initio.
- VI.A.7. Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must pay an annual fee to cover the costs of inspections and administration.

- VI.A.8. Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.
- VI.A.9. Registration under this permit is approved in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the general permit registration.
- VI.B. Registration Revision / Termination
- VI.B.1. The Division may deny or revoke registration under the general permit under the circumstances specified in Regulation No. 3, Part B, Section III.I.3.c.
- VI.B.2. A registration under this general permit may be reissued to a new owner by the Division as provided in Regulation No. 3, Part B, Section II.B. upon a request for transfer of ownership and the submittal of a revised APEN and the required fees.
- VI.B.3. Registration under this general permit is voluntary. The permittee may withdraw or cancel a registration under this general permit at any time by notifying the Division in writing.
- VI.C. General Permit Revision / Termination
- VI.C.1. This general permit remains in effect until revised or terminated by the Division in accordance with the provisions of Regulation No. 3.
- VI.C.2. After public notice and comment as provided by Regulation No. 3, Part B, Section III.I.7., the Division may revise this general permit in order to add or delete requirements or limitations to the permit. This public notice shall be conducted in a manner consistent with the provisions of Regulation No. 3, Part B, Section III.C.4.
- VI.C.3. If a revised general permit is issued by the Division, any existing registration to use the general permit will be automatically converted to a registration to use the revised general permit, provided that the permittee continues to meet all requirements of the revised general permit. Persons not wishing to continue coverage under the revised general permit shall have the option of applying for an individual permit as required by Regulation No. 3, Part B.
- VI.C.4. If the Division terminates this general permit, it will provide written notice to affected registrants prior to the termination of the general permit. The notice will advise registrants that they must apply for an individual permit as required by Regulation No. 3, Part B.
- VI.D. General Permit Registration Approval Process
- VI.D.1. Conditional certification of a registration under this general permit is effective from the date the complete registration request is received by the APCD. A complete registration request consists of all General Permit application materials required by the APCD. The owner or operator may commence construction and operation of the hydrocarbon liquid loading as represented in the registration upon receipt of the completed registration request by the APCD. In the event the hydrocarbon liquid loading operation(s) does not qualify for registration under the general permit the owner or operator accepts the liability of commencing these activities.
- VI.D.2. The APCD will determine completeness of the General Permit registration request within thirty (30) days of the date of receipt of the request and provide written notification to the applicant. If the applicant does not receive notification of a completeness determination from the APCD within

thirty (30) days, the General Permit registration request shall be deemed complete for the purpose of Condition VI.D.1.

- VI.D.3. The APCD has ninety (90) calendar days from the date the APCD receives a complete General Permit registration request to provide the applicant with a written approval or denial of the registration.

Permit History	
Date Issued	Notes
April 17, 2014	Final Approval Version 1