

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 Produced Water Storage Tank Batteries

PERMIT NO: GP05 Version 1

FINAL APPROVAL

Roland C. Hea, P.E.
Permitting Section Supervisor

September 28, 2009
Date Issued

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. Produced water storage tank batteries comprised of a single storage tank or a group of storage tanks used for the storage of produced water.
- I.A.2. Combustion devices, vapor recovery units, or other Division approved control equipment used to reduce emissions by at least 95%.
- I.A.3. Equipment as described in condition 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.23.
- I.B.2. Equipment subject to a New Source Performance Standard (NSPS).
- I.B.3. 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.

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 Condition III.A occurred within the same calendar year. These changes should be reflected in any revised APEN required by Condition VI.A.1.

Changes in throughput not resulting in a facility classification change; removal of a well serviced by the battery; repiping of an existing well; addition of a new well to the battery; or addition, replacement or removal of a separator or tank.

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. Leakage of VOCs to the atmosphere must be minimized as follows:

IV.B.1.a. Thief hatch seals shall be inspected for integrity annually and replaced as necessary. Thief hatch covers shall be weighted and properly seated.

IV.B.1.b. Pressure relief valves (PRV) shall be inspected for proper operation annually and replaced as necessary. PRVs 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.1.c. Annual inspections of thief hatches and PRV shall be documented with an indication of status, a description of any problems found, and their resolution.

IV.B.2. 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. Fluctuations in emissions that occur when the separator dumps into the tank are reasonably foreseeable.

IV.B.3. All produced water collection, storage, processing and handling 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.

IV.B.4. 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 produced water production through the battery during the downtime. During control device downtime, emissions shall be considered to be uncontrolled.

IV.B.5. 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 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 three years.

- V.B. For all tank batteries, the following records shall be maintained on site or at a local field office with site responsibility for Division review:
- V.B.1. The current version of this general construction permit.
- V.B.2. The most recently submitted APEN and any required site-specific emission factor documentation.
- 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 produced water production 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.5. Records required by Conditions III.B (AOS), IV.B.1.c (Annual tank inspections) and IV.B.4 (Control device monitoring).

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 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. Prevention of Significant Deterioration (PSD) requirements 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 PSD threshold and will require a full PSD review of the source as though construction had not yet commenced on the source. The source shall not exceed the PSD threshold until a PSD permit is granted. (Reference: Regulation No. 3, Part D, Section VI.B.4.)
- 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 two (2) hours after the start of the 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.

VII. Colorado Oil and Gas Conservation Commission Requirements

VII.A. This permit fulfills the requirement to hold a valid permit reflecting the storage tank and associated control device per the Colorado Oil and Gas Conservation Commission rule 805b(2)(B).

Permit History

Date Issued	Notes
September 28, 2009	Final Approval Version 1