

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 18 PRODUCTION OPERATING PRACTICES

19.15.18.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Oil Conservation Division.
[19.15.18.1 NMAC - N, 12/1/08]

19.15.18.2 SCOPE: 19.15.18 NMAC applies to persons engaged in oil and gas development and production within New Mexico.
[19.15.18.2 NMAC - N, 12/1/08]

19.15.18.3 STATUTORY AUTHORITY: 19.15.18 NMAC is adopted pursuant to the Oil and Gas Act, NMSA 1978, Section 70-2-6, Section 70-2-11 and Section 70-2-12.
[19.15.18.3 NMAC - N, 12/1/08]

19.15.18.4 DURATION: Permanent.
[19.15.18.4 NMAC - N, 12/1/08]

19.15.18.5 EFFECTIVE DATE: December 1, 2008, unless a later date is cited at the end of a section.
[19.15.18.5 NMAC - N, 12/1/08]

19.15.18.6 OBJECTIVE: To regulate the production of oil and gas wells within the state in order to prevent waste, protect correlative rights and protect public health and the environment.
[19.15.18.6 NMAC - N, 12/1/08]

19.15.18.7 DEFINITIONS: “Drip” means a liquid hydrocarbon incidentally accumulating in a gas gathering or transportation system.
[19.15.2.7 NMAC - Rp, Subsection A of 19.15.5.314 NMAC, 12/1/08]

19.15.18.8 GAS-OIL RATIO AND PRODUCTION TESTS:

A. An operator shall take a gas-oil ratio test no sooner than 20 days nor later than 30 days following the completion or recompletion of each oil well, if:

- (1) the well is a wildcat, or
- (2) the well is located in a pool that is not exempt from 19.15.18.8 NMAC’s requirements.

B. Provisions of 19.15.18.8 NMAC that are applicable to the pool shall govern wells completed within one mile of the outer boundary of a defined oil pool producing from the same formation. The operator shall report the test results to the division on form C-116 within 10 days following the test’s completion. The gas-oil ratio the operator reports shall become effective for proration purposes on the first day of the calendar month following the date they are reported.

C. Each operator shall take an annual gas-oil ratio test of each producing oil well, located within a pool not exempted from the requirements of 19.15.18.8 NMAC, during a period the division prescribes. The division shall establish a gas-oil ratio survey schedule setting forth the period in which operators are to take gas-oil ratio tests for each pool where the division requires a test. The gas-oil ratio test shall be a test the division designates, made by the method and in the manner the division in its discretion may prescribe from time to time.

D. An operator shall file the results of gas-oil ratio tests taken during survey periods with the division on form C-116 not later than the 10th of the month following the close of the survey period for the pool in which the well is located. The gas-oil ratios thus reported shall become effective for proration purposes on the first day of the second month following the survey period’s close. Unless the operator files form C-116 within the required time limit, the division shall not assign a further allowable to the affected well until the operator file form C-116.

E. In the case of special tests taken between regular gas-oil ratio surveys, the gas-oil ratio becomes effective for proration purposes upon the date the division receives form C-116 reporting the test results. A special test does not exempt a well from the regular survey.

F. During a gas-oil ratio test, an operator shall not produce a well at a rate exceeding the top proration unit allowable for the pool in which it is located by more than 25 percent.

G. The director may exempt such pools as the director deems proper from the gas-oil ratio test

requirements of 19.15.18.8 NMAC. The exemption shall be by division order directed to the operators in the pool being exempted.

H. The director may require annual productivity tests of oil wells in pools exempt from gas-oil ratio tests, during a period the division prescribes. The division shall establish an oil well productivity survey schedule setting forth the period in which productivity tests are to be taken for each pool where the division requires the tests.

I. An operator shall file the results of productivity tests taken during survey periods with the division on form C-116 (with the word "exempt" inserted in the column normally used for reporting gas production) not later than the 10th of the month following the close of the survey period for the pool in which the well is located. Unless the operator files form C-116 within the required time limit, the division shall not assign further allowables to the affected well until the operator files form C-116.

J. In the case of special productivity tests taken between regular test survey periods, which result in a change of allowable assigned to the well, the allowable change shall become effective upon the date the division receives form C-116. A special test does not exempt a well from the regular survey.

K. During the productivity test, an operator shall not produce a well at a rate exceeding the top proration unit allowable for the pool in which it is located by more than 25 percent.

[19.15.18.8 NMAC - Rp, 19.15.5.301 NMAC, 12/1/08]

19.15.18.9 BOTTOM HOLE PRESSURE TESTS: The operator shall make a bottom hole pressure test on the discovery well of a new pool and shall report the results of the test to the division within 30 days after the discovery well's completion. On or before December 1 of each calendar year the division shall designate the months in which operators shall take bottom hole pressure tests in designated pools. The division shall include in the designated list the required shut-in pressure time and datum of tests to be taken in each pool. In the event a newly discovered pool is not included in the division's list, the division shall issue a supplementary bottom hole pressure schedule. Tests the division designates shall only apply to flowing wells in each pool. A person qualified by both training and experience to make such test shall make the test with an approved bottom hole pressure instrument that is calibrated against an approved dead-weight tester at intervals frequent enough to ensure its accuracy within one percent. Unless the division otherwise designates, all wells shall remain completely shut in for at least 24 hours prior to the test. In the event the division does not establish a definite datum the operator shall obtain the bottom hole determination as close as possible to the mid-point of the reservoir's productive sand. The operator shall report the test results to the division on form C-124, which shall contain the information required by Subsection B of 19.15.7.32 NMAC.

[19.15.18.9 NMAC - Rp, 19.15.5.302 NMAC, 12/1/08]

19.15.18.10 CONTROL OF MULTIPLE COMPLETED WELLS: The operator shall at all times operate, produce and maintain multiple completed wells that the division has authorized in a manner to ensure the complete segregation of the various common sources of supply. The division may require the operator take tests the division deems necessary to determine the effectiveness of segregation of the different common sources of supply.

[19.15.18.10 NMAC - Rp, 19.15.5.304 NMAC, 12/1/08]

19.15.18.11 METERED CASINGHEAD GAS: The owner of a lease is not required to measure the exact amount of casinghead gas the owner produces and uses for fuel purposes in the lease's development and normal operation. The owner of the lease shall meter and report casinghead gas produced and sold or transported away from a lease, except small amounts of flare gas, in cubic feet monthly to the division. The owner of the lease may calculate the amount of casinghead gas sold in small quantities for use in the field upon a basis generally acceptable in the industry, or upon a basis approved by the division in lieu of meter measurements.

[19.15.18.11 NMAC - Rp, 19.15.5.305 NMAC, 12/1/08]

19.15.18.12 CASINGHEAD GAS:

A. An operator shall not flare or vent casinghead gas produced from a well after 60 days following the well's completion.

B. An operator seeking an exception to Subsection A of 19.15.18.12 NMAC shall file an application for an exception on form C-129 with the appropriate division district office. The district supervisor may grant an exception when the flaring or venting casinghead gas appears reasonably necessary to protect correlative rights, prevent waste or prevent undue hardships on the applicant. The district supervisor shall either grant the exception within 10 days after the application's receipt or refer it to the director who shall advertise the matter for public hearing if the applicant desires a hearing.

C. The division shall suspend the allowable assigned to the well if the operator flares or vents gas from a well in violation of 19.15.18.12 NMAC.

D. No extraction plant processing gas in the state shall flare or vent casinghead gas unless flaring or venting is made necessary by mechanical difficulty of a very limited temporary nature or unless the gas flared or vented is of no commercial value.

E. In the event of a more prolonged mechanical difficulty or in the event of plant shut-downs or curtailment because of scheduled or non-scheduled maintenance or testing operations or other reasons, or in the event a plant is unable to accept, process and market all of the casinghead gas produced by wells connected to its system, the plant operator shall notify the division as soon as possible of the full details of the shut-down or curtailment, following which the division shall take such action as is necessary to reduce the total flow of gas to the plant.

F. Pending connection of a well to a gas-gathering facility, or when a well has been excepted from the provisions of Subsection A of 19.15.18.12 NMAC, the operator shall burn all gas produced and not used, and report the estimated volume on form C-115.

G. The provisions of Subsection A of 19.15.18.12 NMAC do not apply to wells completed prior to January 1, 1971, in pools that had no gas-gathering facilities on that date, provided however the provisions shall apply to all wells in such a pool 60 days after the date of first casinghead gas connection in the pool.
[19.15.18.12 NMAC - Rp, 19.15.5.306 NMAC, 12/1/08]

19.15.18.13 OPERATION AT BELOW ATMOSPHERIC PRESSURE:

A. An operator may use vacuum pumps, gathering system compressors or other devices to operate a well or gathering system at below atmospheric pressure only if that operator has:

(1) executed a written agreement with the operator of the downstream gathering system or pipeline to which the well or gathering system so operated is immediately connected allowing operation of the well or gathering system at below atmospheric pressure; and

(2) filed a sundry notice in the appropriate division district office for each well operated at below atmospheric pressure or served by a gathering system operated at below atmospheric pressure, within 90 days before beginning operation at below atmospheric pressure, notifying the division that the well or gathering system serving the well is being operated at below atmospheric pressure.

B. A gathering system operator may use vacuum pumps, gathering system compressors or other devices to operate a gathering system at below atmospheric pressure, or may accept gas originating from a well operated at below atmospheric pressure or that has been carried by an upstream gathering system operated at below atmospheric pressure, only if that operator has executed a written agreement with the operator of the downstream gathering system or pipeline to which the gathering system is immediately connected allowing delivery of gas from a well or gathering system that has been operated at below atmospheric pressure into the downstream gathering system or pipeline.

[19.15.18.13 NMAC - Rp, 19.15.5.307 NMAC, 12/1/08]

19.15.18.14 SALT OR SULPHUR WATER: An operator shall report monthly on form C-115 the amount of water produced with the oil and gas from each well.

[19.15.18.14 NMAC - Rp, 19.15.5.308 NMAC, 12/1/08]

19.15.18.15 AUTOMATIC CUSTODY TRANSFER EQUIPMENT:

A. Oil shall be received and measured in facilities of an approved design. The facilities shall permit the testing of each well at reasonable intervals and may be comprised of manually gauged, closed stock tanks for which the operator of the ACT system has prepared proper strapping tables, or of ACT equipment. The division shall permit ACT equipment's use only after the operator complies with the following. The operator shall file with the division form C-106 and receive approval for use of the ACT equipment prior to transferring oil through the ACT system. The carrier shall not accept delivery of oil through the ACT system until the division has approved form C-106.

B. The operator of the ACT system shall submit form C-106 to the appropriate division district office, which is accompanied by the following:

(1) plat of the lease showing all wells that the any well operator will produce into the ACT system;

(2) schematic diagram of the ACT equipment, showing on the diagram all major components such as surge tanks and their capacity, extra storage tanks and their capacity, transfer pumps, monitors, reroute valves, treaters, samplers, strainers, air and gas eliminators, back pressure valves and metering devices (indicating type and

capacity, *i.e.* whether automatic measuring tank, positive volume metering chamber, weir-type measuring vessel or positive displacement meter); the schematic diagram shall also show means employed to prove the measuring device's accuracy; and

(3) letter from transporter agreeing to utilization of ACT system as shown on schematic diagram.

C. The division shall not approve form C-106 unless the operator of the ACT system will install and operate the ACT system in compliance with the following requirements.

(1) Provision is made for accurate determination and recording of uncorrected volume and applicable temperature, or of temperature corrected volume. The system's overall accuracy shall equal or surpass manual methods.

(2) Provision is made for representative sampling of the oil transferred for determination of API gravity and BS&W content.

(3) Provision is made if required by either the oil's producer or the transporter to give adequate assurance that the ACT system runs only merchantable oil.

(4) Provision is made for set-stop counters to stop the flow of oil through the ACT system at or prior to the time the allowable has been run. Counters shall provide non-reset totalizers that are visible for inspection at all times.

(5) Necessary controls and equipment are enclosed and sealed, or otherwise arranged to provide assurance against, or evidence of, accidental or purposeful mismeasurement resulting from tampering.

(6) The ACT system's components are properly sized to ensure operation within the range of their established ratings. All system components that require periodic calibration or inspection for proof of continued accuracy are readily accessible; the frequency and methods of the calibration or inspection shall be as set forth in Paragraph (12) of Subsection C of 19.15.18.15 NMAC.

(7) The control and recording system includes adequate fail-safe features that provide assurance against mismeasurement in the event of power failure, or the failure of the ACT system's component parts.

(8) The ACT system and allied facilities include fail-safe equipment as may be necessary, including high level switches in the surge tank or overflow storage tank that, in the event of power failure or malfunction of the ACT or other equipment, will shut down artificially lifted wells connected to the ACT system and will shut in flowing wells at the well-head or at the header manifold, in which latter case the operator of the ACT system shall pressure test all flowlines to at least 1½ times the maximum well-head shut-in pressure prior to the ACT system's initial use and every two years thereafter.

(9) As an alternative to the requirements of Paragraph (8) of Subsection C of 19.15.18.15 NMAC the producer shall provide and at all times maintain a minimum of available storage capacity above the normal high working level of the surge tank to receive and hold the amount of oil that may be produced during maximum unattended time of lease operation.

(10) In all ACT systems employing automatic measuring tanks, weir-type measuring vessels, positive volume metering chambers or any other volume measuring container, the container and allied components shall be properly calibrated prior to initial use and shall be operated, maintained and inspected as necessary to ensure against incrustation, changes in clingage factors, valve leakage or other leakage and improper action of floats, level detectors, etc.

(11) In ACT systems employing positive displacement meters, the meter and allied components shall be properly calibrated prior to initial use and shall be operated, maintained and inspected as necessary to ensure against oil mismeasurement.

(12) The operator of the ACT system shall check the measuring and recording devices of ACT systems for accuracy at least once each month unless it has obtained an exception to such determination from the division. Where applicable, the operator of the ACT system shall use API standard 1101, Measurement of Petroleum Hydrocarbons by Positive Displacement Meter. Meters may be proved against master meters, portable prover tanks or prover tanks permanently installed on the lease. If the operator of the ACT system uses permanently installed prover tanks, the distance between the opening and closing levels and the provision for determining the opening and closing readings shall be sufficient to detect variations of 5/100 of one percent. The operator of the ACT system shall file reports of determination on the division form entitled "meter test report" or on another acceptable form in duplicate with the appropriate division district office.

(13) To obtain an exception to the requirement in Paragraph (12) of Subsection C of 19.15.18.15 NMAC that all measuring and recording devices be checked for accuracy once each month, either the producer or transporter may file a request with the director setting forth facts pertinent to the exception. The application shall include a history of the average factors previously obtained, both tabulated and plotted on a graph of factors versus time, showing that the particular installation has experienced no erratic drift. The applicant shall also furnish

evidence that the other interested party has agreed to the exception. The director may then set the frequency for determination of the system's accuracy at the interval which the director deems prudent.

D. The division may revoke its approval of an ACT system's form C-106 if the system's operator fails to operate it in compliance with 19.15.18.15 NMAC.
[19.15.18.15 NMAC - Rp, 19.15.5.309 NMAC, 12/1/08]

19.15.18.16 TANKS, OIL TANKS, FIRE WALLS AND TANK IDENTIFICATION:

A. No person shall store or retain oil in earthen reservoirs or in open receptacles. Dikes or fire walls are not required except an operator shall erect and maintain fire walls around permanent oil tanks or tank batteries that are within the corporate limits of a city, town or village, or where such tanks are closer than 150 feet to a producing oil or gas well or 500 feet to a highway or inhabited dwelling or closer than 1000 feet to a school or church, or where the tanks are so located that the division deems them an objectional hazard. Where fire walls are required, fire walls shall form a reservoir having a capacity one-third larger than the capacity of the enclosed tank or tanks.

B. The operator shall identify oil tanks, tank batteries, ACT systems, tanks used for salt water collection or disposal and tanks used for sediment oil treatment or storage by a sign posted on or not more than 50 feet from the tank, tank battery or system. The sign shall be of durable construction and the operator shall keep the lettering on the sign in a legible condition; the lettering shall be large enough to be legible under normal conditions at a distance of 50 feet and the sign shall identify the operator's name, the name of the lease being served by the tank or system, if any, and the location of the tank or system by unit letter, section, township and range.
[19.15.18.16 NMAC - Rp, 19.15.5.310 NMAC, 12/1/08]

19.15.18.17 SEDIMENT OIL, TANK CLEANING AND TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS:

A. No person shall clean a tank of sediment oil or remove sediment oil from a lease without the appropriate division district office's prior approval. The lease operator or the company contracted or otherwise authorized to perform the tank cleaning may receive authorization for tank cleaning by obtaining division approval on form C-117-A. No operator, contractor or other party shall clean a tank of sediment oil or remove sediment oil from a lease without an approved copy of form C-117-A at the site.

B. No person shall destroy sediment oil without the appropriate division district office's approval of an application to destroy the sediment oil on form C-117-A. Unless a person receiving an authorization to destroy sediment oil utilizes the authorization to destroy sediment oil within 10 days after division approval of the form C-117-A the authorization is automatically revoked. However, the district supervisor may approve one 10 day extension for good cause shown.

C. A person, other than a treating plant operator, who cleans a tank of sediment oil and removes sediment oil from a lease shall file form C-117-B with the division setting out all information the form requires.

D. A person taking possession of or disposing of sediment oil shall test a representative sample of sediment oil in a manner designed to accurately estimate the percentage of good oil expected to be recovered from the sediment oil. The person shall perform the test prior to transport and prior to commingling with sediment oil from other leases or sources and record the results on form C-117-A. The division recommends the standard centrifugal tests prescribed by API publication Sediment and Water, Sect: 4: Determination of Sediment and Water in Crude Oil by the Centrifuge Method (Field Procedure), MPMS 10.4. The person may use other test procedures if the procedures reliably predict the percentage of good oil to be recovered from sediment oil.

E. A person taking possession of or disposing of sediment oil shall report sediment oil removed from storage on form C-115 together with the form C-117-A permit number.

F. Except in an emergency, no person shall deliver miscellaneous hydrocarbons to a treating plant or other facility until that person has obtained division approval on form C-117-A.

G. Whenever an emergency exists that requires delivery of miscellaneous hydrocarbons to a treating plant or other facilities prior to approval of form C-117-A, the transporter of the hydrocarbons shall notify the supervisor of the appropriate division district office of the emergency's nature and extent on the first working day following the emergency and shall file form C-117-A within two working days following the emergency. For prolonged emergencies, the district supervisor may authorize the extended movement of miscellaneous hydrocarbons to a treating plant or other facilities during the emergency period and shall approve a form C-117-A filed subsequent to the emergency's conclusion covering the entire volume of miscellaneous hydrocarbons transported.

[19.15.18.17 NMAC - Rp, 19.15.5.311 NMAC, 12/1/08]

19.15.18.18 EMULSION, BASIC SEDIMENTS AND TANK BOTTOMS: The operator shall operate wells producing oil in a manner that reduces as much as practicable the formation of emulsion and basic sediments. No person shall allow these substances and tank bottoms to pollute fresh waters or cause surface damage. [19.15.18.18 NMAC - Rp, 19.15.5.313 NMAC, 12/1/08]

19.15.18.19 GATHERING, TRANSPORTING AND SALE OF DRIP:

- A.** The waste of drip is prohibited when it is economically feasible to salvage the drip.
 - B.** A person may move and sell drip, provided it complies with 19.15.18.19 NMAC.
 - C.** A person shall not transport or sell drip until the gas transporter files form C-104 designating the drip transporter authorized to remove the drip from its gas gathering or transportation system.
 - D.** Each month, a person transporting drip within the state shall complete and maintain for division inspection form C-112, showing the amount, source and disposition of drip handled during the reporting period, and such other reports as the division may require.
 - E.** Prior to commencement of operations, every person transporting drip directly from a gas gathering or transportation system shall file with the division plats drawn to scale, locating and identifying each drip trap that the person is authorized to service.
 - F.** A person transporting drip directly from a gas gathering or transportation system shall keep a record of daily acquisitions from each drip trap that the person is authorized to service and make the records available at all reasonable times for inspection by the division or its authorized representatives.
 - G.** A gas transporter shall, on or before the first day of November of each year, file with the division maps of its entire gas gathering and transportation systems, locating and identifying on the map each drip trap in the systems, the maps to be accompanied by a report, on a division-prescribed form, showing the disposition being made of the drip from each of the drip traps.
- [19.15.18.19 NMAC - Rp, 19.15.5.314 NMAC, 12/1/08]

HISTORY of 19.15.18 NMAC:

History of Repealed Material: 19.15.5 NMAC, Oil Production Operating Practices (filed 04/27/2000) repealed 12/1/08.

NMAC History:

Those applicable portions of 19.15.5 NMAC, Oil Production Operating Practices Sections 301, 302, 304 - 311, 313 & 314) (filed 04/27/2000) were replaced by 19.15.18 NMAC, Production Operating Practices, effective 12/1/08.