

ALABAMA STATE OIL AND GAS BOARD GOVERNING THE UNDERGROUND STORAGE
OF GAS IN SOLUTION-MINED CAVITIES
ADMINISTRATIVE CODE

CHAPTER 400-6-1
GENERAL

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400-6-1-.01 Applicability.

The following rules and regulations shall govern the underground storage of gas in solution-mined cavities. These rules apply to all underground gas storage operations in solution-mined cavities within the territorial jurisdiction of the State.

Author: State Oil And Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1 et seq.

History: New Rule: Filed April 11, 2000; effective May 16, 2000.

400-6-1-.02 Application Of Other Rules.

(1) In addition to the rules and regulations governing underground storage of gas in solution-mined cavities set forth in Rule 400-6-1-.01, et seq., Rules and Regulations of the State Oil and Gas Board of Alabama Governing Practice and Procedure, Rule 400-7-1-.01, et seq. shall apply to underground storage of gas in solution-mined cavities.

(2) Unless otherwise specified by the Supervisor, Rules and Regulations of the State Oil and Gas Board of Alabama Governing Onshore Lands Operations, Rule 400-1-1-.01, et seq., or Rules and Regulations of the State Oil and Gas Board of Alabama Governing Submerged Offshore Lands Operations, Rule 400-2-1-.01, et seq., whichever is applicable, shall apply to underground storage of gas in solution-mined cavities, with the exception of the following:

(a) For Rules and Regulations of the State Oil and Gas Board of Alabama Governing Onshore Lands Operations, Rule 400-1-1-.01, et seq.

1. 400-1-1-.01 Applicability,
2. 400-1-1-.03 Repealed Rules, Special Field Rules, and Orders,
3. 400-1-1-.05 (29, 31, and 84) Definitions,
4. 400-1-1-.07 Determining and Naming Fields and Pools,
5. 400-1-2-.02 Spacing of Wells,
6. 400-1-2-.03 Bond,
7. 400-1-4-.14 Plugging and Abandonment of Wells,
8. 400-1-4-.17 Request to Classify Wells as Temporarily Abandoned or Shut in,
9. 400-1-5 Testing and Allowable,
10. 400-1-6-.01 General,
11. 400-1-6-.02 Protection of Oil and Gas,
12. 400-1-6-.03 Initial Bottom Hole Pressure Survey,
13. 400-1-6-.04 Pressure-Volume-Temperature Analysis,
14. 400-1-6-.05 Procedures for Multiple Completions,
15. 400-1-6-.06 Recompletion or Reworking,
16. 400-1-6-.07 Tanks or Tank Batteries,
17. 400-1-6-.08 Dikes,
18. 400-1-6-.09 Berms,
19. 400-1-6-.11 Location of Fired Vessels,
20. 400-1-6-.12 Authorization to Clean Tanks
21. 400-1-7 Processing, and
22. 400-1-8 Transportation.

(b) For Rules and Regulations of the State Oil and Gas Board of Alabama Governing Submerged Offshore Lands Operations, Rule 400-2-1-.01, et seq;

1. 400-2-1-.01 Applicability,

2. 400-2-1-.03 Repealed Rules, Special Field Rules, and Orders,
3. 400-2-1-.05(29 and 79) Definitions,
4. 400-2-1-.07 Determining and Naming Fields and Pools,
5. 400-2-2-.02 Spacing of Wells,
6. 400-2-2-.03 Bond,
7. 400-2-4-.11 Plugging and Abandonment of Wells,
8. 400-2-4-.14 Request to Classify Wells as Temporarily Abandoned or Shut in,
9. 400-2-5 Testing and Allowable,
10. 400-2-6-.01 General,
11. 400-2-6-.02 Protection of Oil and Gas,
12. 400-2-6-.03 Initial Bottom Hole Pressure Survey,
13. 400-2-6-.04 Pressure-Volume-Temperature Analysis,
14. 400-2-6-.05 Procedures for Multiple Completions,
15. 400-2-6-.06 Recompletion or Reworking,
16. 400-2-6-.07 Subsurface Safety Devices,
17. 400-2-6-.08 Wellhead Equipment and Testing Procedures,
18. 400-2-6-.10 Production Facilities, Processing Facilities, and Offshore Plants, and
19. 400-2-7 Transportation.

Author: State Oil And Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1 et seq.

History: New Rule: Filed April 11, 2000; effective May 16, 2000.

400-6-1-.03 Repealed Rules, Special Storage Rules, And Orders.

All rules and regulations governing the conservation of oil and gas in Alabama which have been heretofore promulgated by the Board under the authority of Act No. 1, approved May 22, 1945, General Act of Alabama, Regular Session 1945, are hereby repealed, rescinded, and superseded by these rules and regulations; provided, however, no special storage rules or other orders of the

Board are so repealed, rescinded, or superseded. Special storage rules and orders will be issued when required and shall prevail over these rules and regulations, where in conflict therewith.

Author: State Oil And Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1 et seq.

History: New Rule: Filed April 11, 2000; effective May 16, 2000.

400-6-1-.04 Authority.

Rules, regulations, and orders shall be adopted in accordance with the requirements of §§9-17-150 et seq. of the Code of Ala. 1975.

Author: State Oil And Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1 et seq.

History: New Rule: Filed April 11, 2000; effective May 16, 2000.

400-6-1-.05 Definitions.

In addition to the definitions set forth in Rule 400-1-1-.05 or 400-2-1-.05, whichever is applicable unless the context otherwise requires, the following words shall have the meanings indicated when used within this rule:

(1) **Blanket material** shall mean any material used in solution mining to prevent erosion of the cavity roof or deterioration of salt around the casing seat. Blanket materials are generally hydrocarbons such as diesel oil, condensate, or liquefied petroleum products which are lighter than water and inert to salt.

(2) **Brine** shall mean the fluid resulting from the dissolution of salt formations with fresh water during salt solution mining.

(3) **Buffer zone** shall mean that portion of the subsurface surrounding the storage cavity designated to insure the safe operation of the storage of gas and to protect the storage facility.

(4) **Cavity site** shall mean the surface boundaries surrounding the storage well whose downward projection shall encompass the walls or sides of the storage cavity.

(5) **Certificate of effectiveness** shall mean a certificate, entitled "Certificate of Effectiveness" which shall be signed and acknowledged by the storage operator and which shall contain

(a) an affidavit that the storage operator has acquired by eminent domain or otherwise all necessary ownership rights with respect to the storage facility and

(b) the date upon which the storage facility shall become effective.

(6) **Cushion gas** shall mean the volume of gas required as permanent storage inventory to maintain adequate cavity pressure and insure cavity integrity, also called "base gas".

(7) **Gas** shall mean all natural gas, casinghead gas, and occluded natural gas found in coalbeds, and all other hydrocarbons not defined as oil in Section 9-17-1(3) of the Code, except and not including liquid petroleum gas.

(8) **Facility boundaries** shall mean

(1) the boundaries of the cavity site,

(2) the area that would be enclosed within a downward projection of the cavity site area as a horizontal plane to a depth being 400' above the storage well casing shoe,

(3) from this depth the boundaries shall be enlarged to a horizontal plane so as to include the buffer zone, and

(4) these boundaries shall include the area that would be enclosed within a projection of this enlarged plane downward to a depth 400' below the bottom of the storage cavity.

(9) **Gathering line** shall mean the line between the last positive shut-off valve at the wellhead to the pipeline or header where two or more such lines converge.

(10) **Order of approval** shall mean an order issued by the Board, after notice and hearing,

(i) approving the underground storage of gas in an underground salt cavity,

(ii) designating the horizontal and vertical boundaries of the storage facility, such boundaries to include within them any necessary or reasonable buffer zone for the purpose of ensuring the safe operation of the storage facility and to protect the storage facility against pollution, invasion, and escape or migration of gas therefrom,

(iii) designating the minimum and maximum operating pressures of the storage facility,

(iv) designating the storage operator for said facility,

(v) adopting special rules for the operation of the facility, and

(vi) containing the findings required by Section 9-17-152(a) of the Code.

(11) **Special storage rules** shall mean those rules promulgated for, and which are limited in their application to, individual underground storage facilities within the State of Alabama.

(12) **Storage cavity** shall mean that portion of the subsurface salt formation underlying the cavity site that will comprise the storage cavity constructed for the underground storage of natural gas.

(13) **Storage operator** shall mean any company, person, corporation, partnership, limited partnership, association of persons, municipality, association of municipalities, public utility, gas district, or other entity, authorized by the Board pursuant to §9-17-152 of the Code to operate any storage facility.

(14) **Storage well** shall mean the wellhead and wellbore that connects the storage cavity with the wellhead.

(15) **Underground source of drinking water (USDW)**

(a) means an aquifer or its portion:

1. Which supplies any public water system; or

2. Which contains a sufficient quantity of ground water to supply a public water system; and

(i) Currently supplies drinking water for human consumption; or

(ii) Contains fewer than 10,000 mg/l total dissolved solids; and

(b) Which is not an exempted aquifer.

(16) **Underground storage** shall mean the storage of gas in an underground storage cavity.

(17) **Underground storage facility** shall mean an underground solution-mined cavity, the wellbore tubular goods, the wellhead, and related equipment to the last positive shut-off valve before the gathering line that is used or to be used for the underground storage of gas and all surface and subsurface rights and appurtenances necessary or useful in the operation

of the facility for the underground storage of gas, including any necessary or reasonable buffer zone as recommended by the storage operator and approved by the Board for the purpose of insuring the safe operation of the storage of gas and to protect the storage facility against pollution, invasion, and escape or migration of gas therefrom, together with any and all subsequent extensions thereof.

(18) **Working gas** shall mean the portion of the storage volume that can be removed from a storage cavity for deliveries. All other words used herein shall be given their usual, customary, and accepted meaning. All words of a technical nature, or peculiar to the oil and gas industry, shall be given that meaning which is generally accepted within the oil and gas industry.

Author: J. H. Massingill

Statutory Authority: Code of Ala. 1975, §§9-17-1 et seq

History: New Rule: Filed April 11, 2000; effective May 16, 2000.

Amended: Filed October 17, 2000; effective November 21, 2000.

400-6-1-.06 Forms.

(1) The Supervisor may prescribe and require forms within the rules and regulations of the Board as he reasonably deems advisable. The content of such forms and instructions for their completion may be such as the Supervisor may deem advisable, including the changes of such from time to time. All forms set forth in Rule 400-1-1-.06 or 400-2-1-.06, whichever is applicable shall be applicable to the solution-mined cavity storage rules with the exception of the following:

- (a) OGB-9 First Production or Retest Report;
- (b) OGB-10 Multipoint Back-Pressure Test Report For Gas Wells;
- (c) OGB-10A One-Point Back-Pressure Test Report For Gas Wells;
- (d) OGB-12 Operator's Certificate of Compliance and Authorization to Transport Oil, Gas, or Condensate from Well;
- (e) OGB-13 Operator's Certificate of Compliance and Authorization to Transport Products from Plant;
- (f) OGB-14 Operator's Monthly Report from Oil Wells;
- (g) OGB-15 Operator's Monthly Report from Gas Wells;
- (h) OGB-16 Transporter's and Storer's Monthly Report;
- (i) OGB-17 Monthly Report of Fluids Injected;

(j) OGB-18 Monthly Report for Products from Processing, Cleansing, or Extraction Facilities;

(k) OGB-21 Authorization to Clean Tank;

(l) OGB-22 Well Capacity Test; and

(m) OGB-23 Unit Reserve Calculation.

(2) Further, such forms, as applicable, shall be filed in a timely manner by the operator and such other person as required by these rules, and such forms shall be properly and fully completed. All forms shall contain true, correct, and accurate information. The Supervisor may allow the filing of certain data electronically in lieu of forms set forth hereinabove, provided Form OGB-28, Master Electronic Filing Certification, has been filed and approved by the Supervisor. The type data, the method of filing, and the format of filing electronic data must have the prior approval of the Supervisor. An operator shall re-file a Master Electronic Filing Certification, Form OGB-28, on an annual basis or when the name or address of an operator changes.

Author: State Oil And Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1 et seq.

History: New Rule: Filed April 11, 2000; effective May 16, 2000.