Interstate Oil and Gas Compact Commission

IOGCC Model Statute
and
Fieldwide Unitization References
INTERSTATE OIL AND GAS COMPACT COMMISSION

Report of the Unitization-Horizontal Drilling Subcommittee
of the
Energy Resources, Research and Technical Committee

I. Unitization-Horizontal Drilling Subcommittee

Charter

A number of technological developments in oil and gas drilling and production – particularly horizontal drilling – make this an opportune time to review the member states’ statutes concerning reservoir-wide unitization. Texas, the largest oil and gas producing state and the only major oil and gas producing state without a compulsory unitization statute, is presently debating whether to adopt a unitization statute. A creative review of the unitization statutes of member states focused on horizontal drilling (or other modern techniques) may lead to regulatory or legislative proposals that would increase oil and gas production.

Mission

The Steering Committee proposes, therefore, to establish a Unitization-Horizontal Drilling Subcommittee. Its mission would be to review unitization statutes in light of modern techniques for oil and gas development such as horizontal drilling operations.

The subcommittee will determine how member states’ unitization statutes may assist in promoting the use of modern oil and gas producing techniques, such as horizontal drilling, in order to increase production.

Deliverables to be Produced by Subcommittee

The subcommittee will prepare a report to educate the member states and the public on the need to review unitization statutes in light of modern techniques such as horizontal drilling. The subcommittee may recommend state statutes or portions of existing unitization statutes for adoption by member states. The subcommittee may draft its own model legislation. The subcommittee will prepare case studies from member states to be included in the report. The report will be presented to member states at a subsequent IOGCC meeting – perhaps at the IOGCC 1999 Annual Meeting. Further, the report will be disseminated directly to regulatory officials and attorneys for member states and through training sessions where feasible. Ultimately, the goal of the subcommittee will be the same as the goal of the IOGCC itself – the prevention of waste of oil and gas and the promotion of conservation of oil and gas resources.

The subcommittee consisted of 12 members. The subcommittee met in December 1998 at the IOGCC meeting in Salt Lake City, Utah. The Energy Resources, Research and Technology Committee heard a presentation by Dr. Nathan Meehan of Stanford University and the Vice President of Union Pacific Resources on modern techniques for horizontal drilling. The subcommittee compiled technical articles on horizontal drilling, some of which are attached hereto. The subcommittee has compiled regulations addressing horizontal drilling from member states. The committee also reviewed statutes of member states. The subcommittee heard a presentation by Morris Burns of the Permian Basin Petroleum Association about the need for Texas, a charter member of the IOGCC, to adopt a compulsory unitization statute. The Permian Basin Petroleum Association and other trade associations in Texas drafted legislation, which was not introduced.

The subcommittee determined that it would focus on drafting a statute that allows for and promotes the use of modern techniques such as horizontal drilling and enhanced recovery. A model statute would provide guidance to states updating old statues or drafting new oil and gas statutes.

III. Fieldwide Unitization

Unitization is defined as an effort to consolidate all, or a high percentage of the royalty and working interests in a pool to permit the planning and development of a pool. *Summers Oil and Gas* § 951.

In order to understand fully the process of unitization, a discussion of the development field from the time of drilling the first well through primary operations and unit operations is necessary.

Primary Operations

An operator commences an exploration program by drilling an exploratory well in the operator’s area of interest. The exploratory well or wildcat well is drilled in accordance with the statewide rules and regulations promulgated by the Board. If the operator is successful, then additional wells will be drilled and tested to determine the nature and extent of the oil and gas field.

Before wells are produced on a permanent basis, an operator petitions the Board at a public hearing for the establishment of the field and the adoption of Special Field Rules for the field. A “field” is defined to be “the general area underlaid or appears to be underlaid by at least one pool, and such term shall include the underground reservoir or reservoirs containing crude petroleum oil or natural gas or both.” *Alabama Code* § 9-17-1 (6) (1975). The Special Field Rules define the field...
boundaries and establish various rules that govern all wells drilled in the field, including rules governing well spacing and production allowables. The Special Field Rules for spacing define the drainage or production units for wells in the field. A drainage unit is defined to be “the area in a pool that may be drained efficiently and economically by one well.” *Alabama Code § 9-17-1 (15) (1975).*

The spacing for the wells in the field is often a governmental section or a division thereof, containing 40, 160, or 640 acres. Under primary operations, wells in the field are being produced as new field development wells are being drilled according to the Special Field Rules. During primary operations, mineral interest owners receive production revenues, including royalties, from the oil and gas produced from the well on the unit based on each owner’s proportionate interest in the unit.

**Unit Operations for Enhanced or Secondary Recovery**

After wells in a field have produced under primary operations for a length of time, they will cease to produce at a commercial rate unless enhanced recovery operations are initiated. In order to increase the ultimate production from a field, the operator of the wells must, therefore, initiate unit operations to maintain reservoir pressures throughout the field. Unitization of the field is a prerequisite for initiating enhanced recovery operations.

The primary purposes of unitization or unit operations are to prevent the drilling of unnecessary wells and to increase the ultimate recovery of oil and gas, thereby preventing waste and promoting conservation of the oil and gas resources and protecting the coequal and correlative rights of the mineral interest owners. Unitization provides for the efficient and economic operation of the fieldwide unit in order to achieve maximum recovery of oil and gas. The unitization is effected by the combining or pooling of separate tracts of lands frequently having different ownership in order to operate an entire reservoir as a single unit.

The effect of eliminating the individual drainage units and the placing of the mineral interest owners from each of the units into a single fieldwide unit is to alter the amount of production revenues that each mineral interest owner receives. Upon issuance of an order by a conservation agency providing for unit operations, mineral interest owners in the field will cease to receive production revenues based on oil and gas produced from the well on an individual drainage unit and begin receiving revenues based on their proportionate share or interest from all the wells on the tracts in the field unit as determined by an allocation formula approved by the Board.

At the time of unitization, the field is usually developed and the boundaries of the field are usually well defined, and abundant geological, engineering, and production data have been accumulated by utilizing well data collected since the field was established. A single fieldwide unit allows each mineral interest owner in the field to
share in the total production from all wells in the field based on an allocation formula that represents an owner’s proportionate share of the production from the entire unit.

One objective in unitization is to provide for the best allocation system for the equitable distribution of revenue, which was not possible when the field was created because less was known about the size and extent of the reservoir. Thus, through the unitization process, potential inequities that may exist in primary operations can be corrected and the correlative rights of the mineral interest owners better protected. The determination of a fair and reasonable allocation formula for the distribution of revenues was the central and most controversial issue in the unitization hearings before the conservation agency.

The unitization of fields allows for the implementation of enhanced recovery operations. These operations include the utilization of energy sources, such as gas for injection into the reservoir in order to increase the ultimate production from the reservoir. In order for such injection operations to be successful, it is necessary to force the oil and gas in the reservoir toward wells where the oil and gas can be efficiently produced. H. Williams and C. Meyers, *Oil and Gas Law*, 276 (1984). This requires that the oil and gas migrate across ownership lines, and the creation of a fieldwide unit is necessary to protect correlative rights and to facilitate the cooperation between mineral interest owners in order to increase the ultimate recovery from the reservoir through unit operations.

There are many benefits to unitization. All parties benefit from enhanced recovery. Extraction by primary operation techniques generally recovers ten to thirty percent of the total oil and gas in place. Enhanced recovery methods will usually increase primary recovery by thirty to sixty percent and sometimes by over 100%. All parties benefit because their income is stabilized, prolonged and protected by participation in all the production from all wells in the field rather than reliance upon one well. This stabilization of production has the additional benefit to all parties of making the interest in the fieldwide unit a bankable asset or commodity. R. Meyers, *Pooling and Unitization*, § .01(3) (2d ed. 1967). The state is a major beneficiary of the conservation of the oil and gas resources and the prevention of waste. See generally B. Kramer and P. Martin, *The Law of Pooling and Unitization* (1998) §17.01-18.04; and P. Martin and B. Kramer, *Williams and C. Meyers Oil and Gas Law* § 912, at 95 (1998).
IV. Conclusions of Subcommittee

The subcommittee reached a number of conclusions:

1. Fieldwide unitization is the best legal method to promote increased development of oil and gas resources through technological advancements.

2. A flexible unitization statute promotes increased use of technological advancements, such as horizontal drilling.

3. A unitization statute should grant to the oil and gas conservation agency, broad authority to determine whether a particular technique for enhanced recovery will result in an increase of production.

4. A unitization statute should establish guidelines for the parties in the unit while providing the parties with flexibility establishing the fieldwide unit. The unitization statute should, however, recognize many of the terms allowing for an effective unitization agreement.

Within the subcommittee, a smaller “work group” drafted the model code. The “work group” consisted of Chairman, Marvin Rogers, State Oil and Gas Board of Alabama; Dr. Patrick Martin, professor of Law, Louisiana State University Law School; James Daniel, Murfin Drilling, Kansas; Charles Koch, North Dakota Oil and Gas Division; Norton Brooker, attorney, Alabama; and Ray Smith, Oklahoma Corporation Commission.

V. Comments to Model Statute

The subcommittee adopts the following comments in connection with the model statute:

Standing to File Petition for Unitization

The model statute includes a provision that either the conservation agency or a mineral interest owner may initiate a unitization proposal. In almost all cases, the party initiating a unitization proposal will be the operator of the wells in a field. There may be situations, however, where the conservation agency determines that unitization is the best interest of the state. The agency may “upon its own motion” commence the proceedings and a hearing.

Unitizing Portions of a Pool

The model statute provides that “an entire pool or any portion” of a field may be unitized. In most cases, the conservation agency will unitize an entire pool because the principal purpose of unitization is to conduct cooperative operations to
increase production from the entire pool. There may be times, however, when unit operation for the entire pool is not feasible (for example, where owners in an area are unable to cooperate). The model statute allows unitization to proceed.

Section A requires certain findings by the conservation agency in order for a unitization order to be issued. The state legislatures established oil and gas conservation agencies for the purposes of preventing waste and protecting correlative rights. The findings required in Section A recognize these fundamental purposes.

A.2. “Operative Language”

The findings provided for Section A.2. are fundamental to the work of the subcommittee. Unitization statutes vary greatly among the states. Perhaps the principal provision in a unitization statute is the “operative language” addressing the basis for establishing a fieldwide unit. Older statutes allow unitization only for “secondary recovery.” e.g., Alabama Code 1975 § 9-17-80.

Recent statutes are more liberal. Colorado, for example, provides for unitization “for repressuring or pressure maintenance operations, cycling or recycling operations, including the extraction and separation of liquid hydrocarbons from natural gas in connection therewith, or for carrying on any other methods of cooperative development or operation of a field or pool or a part of either.” The committee reviewed “operative language” from all member states and drafted flexible “operative language.” (Appendix C)

Under the “operative language” in the model statute in Section A.2 allows the conservation agency to establish unit operations for any “method of cooperative development and operation which increases the ultimate recovery of oil and gas.” The language is consistent with the conclusions of the committee that a flexible unitization statute will promote the increased use of technological advancements, such as horizontal drilling, and that a unitization statute should grant the agency broad authority to determine whether a particular technique for enhanced recovery will result in an increase in production.

Further, the board “operative language” recognized that the agencies of the member states have staffs of expert petroleum geologists, petroleum engineers, and geophysicists who are trained and qualified to make or advise commissions and boards on the technical issues, such as proper enhanced recovery techniques for a pool. Limiting the authority of the agency and operator to certain enhanced recovery techniques only limits potential production.
A.3. Profitability

Finding A.3. Unitization statutes require evidence and a finding that the proposed operation will be profitable; i.e., cost of conducting unit operation will “not exceed the value of the estimated recovery.”

Section B, Terms and Conditions

Section B requires that the “terms and conditions” for unitization be “just and reasonable.” Section B grants the agency broad discretion in reviewing a unitization proposal.

Section B.1-9 sets forth provisions required to be addressed in a unitization proposal.

3. B. Allocation Formula

Probably the most important and often most controversial of the terms in a unitization order is Section 3.B – the Allocation Formula. Frequently one of the most contested issues in a unitization proposal and hearing is the plan for allocation of revenues and expenses derived from unit operations. The statutes of member states addressing the allocation formula vary greatly. The statutory provisions of the member states addressing the allocation formula are set forth in Appendix B. Consistent with its conclusion that the agency should have broad discretion, the committee required a “just and reasonable allocation” formula in the model statute.

C.1. Ratification

Section C contains general provisions to be included in a unitization statute. C.1 addresses ratification. Ratification of a unitization proposal is a common device for obtaining the consent of mineral interest owners in lieu of having them sign lengthy and complex documents. The ratification of a unitization proposal may be submitted at the same time the proposal is presented to the oil and gas conservation agency or at a later hearing.

On the next page is a listing, as of June 2000, of the minimum ratification percentage required by the IOGCC member states.
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<tr>
<th>State</th>
<th>Percentage</th>
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It is the opinion of the Unitization-Horizontal Drilling Subcommittee of the Interstate Oil and Gas Compact Commission that a minimum majority percentage required for ratification is desirable not to place too heavy a burden on unit formation. The purpose of the ratification is to ensure general consent of the project. Practical problems are often encountered in obtaining ratification of the royalty owners. The royalty owners are frequently numerous and difficult to locate, and even though unit operations may be clearly beneficial for the reservoir, the unit operator may not be able to secure the ratifications required.
Appendix A
MODEL UNITIZATION STATUTE

The oil and gas conservation agency upon its own motion, or upon the petition by any interested party, shall conduct a hearing to consider the need for the operation as a unit of an entire pool or any portion thereof, in order to increase ultimate recovery of oil or gas from the pool or any portion thereof.

A. The oil and gas conservation agency shall issue an order requiring unit operations, if it finds that:

1. Operation of the pool or any portion thereof is necessary to prevent waste, to increase the recovery of oil or gas, to avoid the drilling of unnecessary wells, and to protect the correlative rights of the owners of the oil and gas;

2. The unit operation of the pool or any portion thereof is reasonably necessary in order to carry on pressure maintenance or repressuring, cycling, water flooding, any combination of these operations, or any other method of cooperative development and operation which increases the ultimate recovery of oil or gas.

3. The estimated cost of conducting the unit operation will not exceed the value of the estimated recovery of oil or gas.

B. The order issued by the oil and gas conservation agency shall be upon terms and conditions that are just and reasonable for unit operations and shall include:

1. A description of the pool or portion thereof, to be so operated, termed the unit area;

2. A statement of the nature of the operations contemplated;

3. A just and reasonable allocation to the separately owned tracts in the unit area of all oil and gas that is produced and saved from the unit area, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost;

4. A provision for the credits and charges to be made in the adjustment among the owners in the unit area for their interest in wells, tanks, pumps, machinery, materials, and equipment contributed to the unit operations;
5. A provision providing how the costs of unit operations, including capital investments and costs of unit termination, shall be determined and charged to the separately owned tracts and how said costs shall be paid, including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay the share of the cost of unit operations charged to such owner, or the interest of such owner, may be sold and the proceeds applied to the payment of such costs;

6. A provision, if necessary, for carrying or otherwise financing any person who elects to be carried or otherwise financed, allowing a reasonable charge for such service payable out of such person’s share of the production;

7. A provision for the supervision and conduct of the unit operations, in respect to which each owner shall have a vote with a value corresponding to the percentage of the costs of unit operations chargeable against the interest of such owner;

8. The time when the unit operations shall commence, and the manner in which, and the circumstances under which, the unit operations and the unit shall terminate and be dissolved;

9. Such additional provisions that are found to be appropriate for carrying on the unit operations, and for the prevention of waste and protection of correlative rights.

C. General Provisions:

1. An order requiring unit operation shall not become effective, unless and until a unitization agreement approved by the oil and gas conservation agency has been signed and approved or ratified in writing by the owners of at least __ percent as costs are shared under the terms of the allocation formula and by __ percent of the royalty owners excluding the owners of overriding royalties, production payments, and any other interest carved out of the working interest in the unit area as revenues are distributed under the terms of the allocation formula.
2. The oil and gas conservation agency may approve additions to the unit portions of pools not previously included within the unit and may extend the unit area as necessary. The oil and gas conservation agency may approve reductions to the unit area as necessary. An order adding to or deleting from the unit area shall be upon terms that are just and reasonable. An order providing for an addition has been approved by the owners of at least ____ percent as costs are shared in the area to be added to unit operation under the terms of the order and by percent of the royalty owners in the area to be added as revenues are distributed under the terms of the order, and the oil and gas conservation agency has made a finding to that effect. An order providing for a deletion to the unit area shall not become effective unless and until approved by the owners of at least ____ percent as costs are shared under the terms of the allocation formula and by ____ percent of the royalty owners in the original unit area have approved of the deletion.

3. An order may provide for unit operations on less than the whole of a pool, where the unit area is of such size and shape as may be reasonably required for that purpose and the conduct thereof will have no significant adverse effect upon other portions of the pool.

4. All operations, including, but not limited to, the commencement, drilling, or operation of a well upon any portion of the unit area shall be deemed for all purposes the conduct of such operations upon each separately owned tract in the unit area by the several owners thereof. The portion of the unit production allocated to a separately owned tract in a unit area shall, when produced, be deemed, for all purposes, to have been actually produced from such tract by a well drilled thereon. Operations conducted pursuant to an order of the oil and gas conservation agency providing for unit operations shall constitute a fulfillment of all the express or implied obligations of each lease or contract covering lands in the unit area to the extent that compliance with such obligations cannot be had without the order of the oil and gas conservation agency.

5. Except to the extent that the parties affected so agree, no order providing for unit operations shall be construed to result in a transfer of all or any part of the title of any person to the oil and gas rights in any tract in the unit area.

6. The oil and gas conservation agency, upon its own motion, or upon the petition by any owner may for good cause terminate unit operation and dissolve the unit.
7. An agreement in the interest of conservation of oil or gas and for the prevention of waste for pressure maintenance or repressuring operations, cycling operations, water flooding operations, any combination of these operations, or any other method of unit or cooperative development and operation of a pool, or any portion thereof, is authorized and shall not be held or construed to violate any statutes relating to trusts, monopolies, or contracts and combinations in the restraint of trade.
Appendix B
VARIOUS UNITIZATION STATUTES
ALLOCATION FORMULAE

Alabama § 9-17-83
(3) An allocation among the separately owned interests derived from or associated with tracts in the unit area of all the oil or gas, or both, produced from the unit pool within the unit area, and not required in the conduct of such operation or unavoidably lost, such allocation to be based on the relative contribution which each such tract or interest is expected to make during the course of such operation, to the total production of oil or gas, or both, so allocated.

California § 3643
(e) The proposed unit agreement provides for an allocation of the unit production among and to the separately owned tracts in the area proposed to be unitized such as will reasonably permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to produce or receive, in lieu thereof, their fair, equitable, and reasonable pro rata share of the unit production or other benefits thereof.

§ 3644
A tract of land’s fair, equitable, and reasonable share of the unit production shall be measured by the value of such tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit area, taking into account, among other things, the following:
(a) The primary tract value based upon the projected future value of hydrocarbon substances that would be produced by primary means from such tract after the date of unitization, if no secondary recovery operation were undertaken.
(b) The secondary tract value based upon consideration of the following factors:
(1) The volume in acre-feet of porous, permeable sand originally saturated with hydrocarbon substances within a zone to be unitized, and underlying such tract.
(2) The hydrocarbon substances per acre-foot of such zone recoverable by means of secondary recovery operations.
(3) The value of the hydrocarbon substances so recoverable from such tract from such zones to be unitized.
(4) In the event the necessary data is not available as listed in paragraphs (1), (2), and (3), the value may be assigned using a prudent engineering method, depending on the data available.
(c) All other factors which significantly bear upon the value of the committed properties for primary and secondary recovery.

**Colorado § 34-60-118(4)**

(c) An allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost. The allocation shall be in accord with the agreement, if any, of the interested parties. If there is no such agreement, the commission shall determine the relative value, from evidence introduced at the hearing, of the separately owned tracts in the unit area, exclusive of physical equipment, for development of oil and gas by unit operations. The commission shall require the production of or may itself produce such geological, engineering, or other evidence, at the hearing or at any continuance thereof, may be required to protect the interests of all interested persons. The production allocated to each tract shall be the proportion that the relative value of each tract so determined bears to the relative value of all tracts in the unit area.

**Kansas § 55-1305**

(c) An allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost. The allocation shall be in accord with the agreement, if any, of all interest owners. If there is no such agreement, the commission shall determine the relative value of the separately owned tracts in the unit area, exclusive of physical equipment, for development of oil and gas by unit operations, and the production allocated to each tract shall be the proportion that the value of each tract so determined bears to the total value of all tracts in the unit area.

**Michigan § 324.61705**

(c) An allocation to the separately owned tracts in the unit area of all the oil and gas that is produced from the unit area and is saved, excepting that production that is used in the conduct of operations on the unit area or unavoidably lost. A separately owned tract’s fair, reasonable, and equitable share of production shall be measured by the value of the tract for oil and gas purposes and its contributing value to the unit in relation to like values of all tracts in the unit.
Mississippi § 53-3-103

(a) Unit operation of the field or of any pool or pools, or of any portion or portions or combinations thereof within the field, is reasonably necessary in order to effectively carry on secondary recovery, pressure maintenance, repressuring operations, cycling operations, water flooding operations, or any combinations thereof, or any other form of joint effort calculated to substantially increase the ultimate recovery of oil or gas or both, from the unit so formed, or to prevent waste as defined in Section 53-1-3. …

(c) A formula for the allocation among the separately owned tracts in the unit area of all the oil or gas, or both, produced and saved from the unit area, and not required in the conduct of such operation, which formula must expressly be found reasonably to permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to receive, in lieu thereof, their fair, equitable and reasonable share of the unit production or other benefits thereof. A separately owned tract’s fair, equitable and reasonable share of the unit production shall be that proportionate part of unit production that the contributing value to the unit bears to the total of all like values of all tracts in the unit, taking into account all pertinent engineering, geological and operating factors that are reasonably susceptible of determination.

North Dakota § 38.08.09.4

2. The division of interest or formula for the apportionment and allocation of the unit production, among and to the several separately owned tracts within the unit area such as will reasonably permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to produce or receive, in lieu thereof, their fair, equitable, and reasonable share of the unit production or other benefits thereof. A separately owned tract’s fair, equitable, and reasonable share of the unit production shall be measured by the value of each such tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit, taking into account acreage, the quantity of oil and gas recoverable therefrom, location on structure, its probable productivity of oil and gas in the absence of unit operations, the burden of operation to which the tract will or is likely to be subjected, or so many of said factors, or such other pertinent determination. Unit production as that term is used in Sections 38-08-09.1 through 38-08-09.16 means and includes all oil and gas produced from a unit area from and after the effective date of the order of the commission creating the unit regardless of the well or tract within the unit area from which the same is produced.
New Mexico § 70-7-6

(1) that the unitized management, operation and further development of the oil or gas pool a portion thereof is reasonably necessary in order to effectively carry on pressure maintenance or secondary or tertiary recovery operations, to substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof. …

(6) that the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis.

B. If the division determines that the participation formula contained in the unitization agreement does not allocate unitized hydrocarbons on a fair, reasonable and equitable basis, the division shall determine the relative value, form evidence introduced at the hearing, taking into account the separately owned tracts in the unit area, exclusive of physical equipment, for development of oil and gas by unit operations, and the production allocated to each tract shall be the proportion that the relative value of each tract so determined bears to the relative value of all tracts in the unit area.

Oklahoma § 287.4

(b) The division of interest or formula for the apportionment and allocation of the unit production, among and to the several separately owned tracts within the unit area such as will reasonably permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to produce or receive, in lieu thereof, their fair, equitable and reasonable share of the unit production or other benefits thereof. A separately owned tract's fair, equitable and reasonable share of the unit production shall be measured by the value of each such tract for oil and gas purposes and its contributing value to the unit in relation to like values recoverable therefrom, location on structure, its probable productivity of oil and gas in the absence of unit operations, the burden of operation to which the tracts will or is likely to be subjected, or so many of said factors, or such other pertinent engineering, geological, or operating factors, as may be reasonably susceptible of determination. Unit production as that term is used in this act shall mean and include all oil and gas produced from a unit area from and after the effective date of the order of the Commission creating the unit regardless of the well or tract within the unit area from which the same is produced.
South Dakota § 45-9-39

(3) An allocation to the separately owned tracts in the unit area of the oil and gas that is produced from the unit area and is saved, being the production that is not used in the conduct of operations on the unit area or not unavoidably lost. The allocation shall be in accord with the agreement, if any, of the interested parties. If there is no such agreement, the board shall determine the relative values, from evidence introduced at the hearing, of the separately owned tracts in the unit area, exclusive of physical equipment, for development of oil and gas by unit operations, and the production allocated to each tract shall be the proportion that the relative values of each tract so determined bears to the relative value of all tracts in the unit area.

West Virginia § 22C-9-8

(3) The production of oil from the unitized pool can be allocated in such a manner as to ensure the recovery by all operators of their just and equitable share of such production.

Wyoming § 30-5-110(e)

(iv) The oil and gas allocated to each separately owned tract within the unit area under the proposed plan unitization represents, so far as can be practically determined, each such tract’s just and equitable share of the oil or gas in the unit area.
Appendix C
VARIOUS UNITIZATION STATUTES
OPERATIVE LANGUAGE

Alabama

Alabama requires “maintenance or partial maintenance of reservoir pressures… recycling, flooding a pool or pools or parts thereof with air, gas, water, liquid hydrocarbons … or any other secondary method of producing hydrocarbons …” § 9-17-80. The Alabama State Oil and Gas Board has proposed a unitization statute which reads:

In order to promote the conservation of oil and gas resources, prevent waste, avoid the drilling of unnecessary wells, allow the drilling of wells at optimum geologic locations, and protect correlative rights, the state oil and gas board of Alabama upon its motion may, or upon the petition of any interested person shall, hold a hearing to consider the need for the operation as a unit of an entire field or of any pool or pools or of any portion of a pool or combinations thereof within a field for the production of oil or gas or both in order to increase the ultimate recovery by enhanced recovery methods, or any other method of cooperative development and operation calculated to increase the ultimate recovery of oil or gas.
§ 9-17-81.

California

The unitized management and operation of the pool or pools, or portions thereof, proposed to be unitized is reasonably necessary in order to carry on pressure maintenance or pressure replenishment operations, cycling or recycling operations, gas injection operations, water flooding operations, reduction of oil viscosity operations, or any combination thereof, or any other form of joint effort calculated to increase the ultimate recovery of oil and gas form the proposed unit area.

Colorado

An agreement for repressuring or pressure maintenance operations, cycling or recycling operations, including the extraction and separation of liquid hydrocarbons from natural gas in connection therewith, or for carrying on any other methods of cooperative development or operation of a field or pool or a part of either … § 34-60-118.

Kansas

The primary production from a pool or a part thereof sought to be unitized has reached a low economic level and, without introduction of artificial energy, abandon-
ment of oil or gas wells is imminent; or the unitized management, operation and further development of the pool or the part thereof sought to be unitized is economically feasible and reasonably necessary to prevent waste within the reservoir and thereby increase substantially the ultimate recovery of oil or gas. § 55-1304.

**Louisiana**

The commission may enter an order requiring the unit operation of a pool or of any portion or combinations thereof within a field. The unit operation shall be in connection with a program designed to avoid the drilling of unnecessary wells, or otherwise to prevent waste, or to increase the ultimate recovery of the unitized minerals by additional recovery methods. § 353.652.

**Michigan**

(4) The supervisor shall issue an order providing for the unit operation of a unit area if he or she finds all of the following:

(a) That the unitization requested is reasonably necessary to substantially increase the ultimate recovery of oil and gas from the unit area.

(b) That the type of operations contemplated by the plan is feasible, will prevent waste, and will protect correlative rights.

(c) That the estimated additional cost of conducting such operations will not exceed the values of the additional oil and gas so recovered.

**Mississippi**

Mississippi requires a showing that:

Unit operation of the field… is reasonably necessary in order to effectively carry on secondary recovery, pressure maintenance, repressuring operations, cycling operations, water flooding operations, or any combination thereof, or any other form of joint effort calculated to substantially increase the ultimate recovery of oil or gas… § 53-3-101.

The state oil and gas board upon the application of any interested person shall, after notice as herein provided, hold a hearing to consider the need for the operation as a unit of an entire field, or of an entire pool or pools, or of any portion or portions or combinations thereof, within a field, for the production of oil or gas or both, in order to increase the ultimate recovery thereof or to prevent waste. The board may reopen the hearing provided in this section at any time prior to the final order adjudicating that the requirements of Section § 53-3-107 have been satisfied. § 53-3-101.
New Mexico

1. That the unitized management, operation and further development of the oil or gas pool or a portion thereof is reasonably necessary in order to effectively carry on pressure maintenance or secondary or tertiary recovery operations, to substantially increase the ultimate recovery of oil and gas from the pool or the unitized portion thereof. § 70-7-6.

North Dakota

1. That the unitized management, operation and further development of a unit source of supply of oil and gas or portion thereof is reasonably necessary in order to effectively carry on pressure-maintenance or repressuring operations, cycling operations, water flooding operations, or any combination thereof, or any other form of joint effort calculated to substantially increase the ultimate recovery of oil and gas from the unit source of supply.

Oklahoma

If upon the filing of a petition therefor and after notice and bearing, all in the form and manner and in accordance with the procedure and requirements hereinafter provided, the Commission shall find (a) that the unitized management, operation and further development of a common source of supply of oil and gas or portion thereof is reasonably necessary in order to effectively carry on pressure-maintenance or repressuring operations, cycling operations, water flooding operations, or any combination thereof, or any other form of joint effort calculated to substantially increase the ultimate recovery of oil and gas from the common source of supply…

South Dakota

The board of minerals and environment shall make an order providing for the unit operation of a pool or part thereof if it finds that:

1. Such operation is reasonably necessary to increase substantially the ultimate recovery of oil or gas; and

2. The value of the estimated additional recovery of oil or gas exceeds the estimated additional cost incident to conducting such operations.

According to Mack McGillivray of the South Dakota Department of Environment and Natural Resources, South Dakota allows no unitization without an enhanced recovery project.
West Virginia

Upon the application of any operator in a pool productive of oil and after notice and hearing, the commissioner may enter an order requiring the unit operation of such pool in connection with a program of secondary recovery of oil, and providing for the unitization of separately owned tracts and interests within such pool… § 22C-9-8.

Wyoming

(a) An agreement for waterflooding or other recovery operations involving the introduction of extraneous forms of energy into any pool, repressuring or pressure-maintenance operations, cycling or recycling operations, including the extraction and separation of liquid hydrocarbons from natural gas in connection therewith, or for carrying any other method of unit or cooperative development or operation of one (1) or more pools or parts thereof, is authorized and may be performed, and shall not be held or construed to violate any of the statutes of this state relating to trusts, monopolies, or contracts and combinations in restraint of trade, and may be submitted to the commission for approval as being in the public interest or reasonable necessary to prevent waste or to protect correlative rights.

§ 30-5-110.
SYNOPSIS

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§ 17.01 Preliminary Matters – The Feasibility of the Project

The creation of a voluntary unit is a difficult and prolonged matter.¹ The more parties who own interests within the unit the more difficult it is to secure final agreement on all of the vital terms of the unitization agreement and the unit operating agreement. Before unitization can be achieved, substantial amounts of geological, geophysical, economic, financial, and other data must be collected and digested to see if the unitization project is feasible.

The unitization idea may come from a petroleum geologist, a reservoir engineer, or other official of a working interest owner. In some cases the impetus for voluntary unitization agreements has come from external sources, such as a state conservation agency. The Railroad Commission’s use of “no-flare” orders to encourage voluntary unitization of several fields in Texas has been well documented.² However, in most cases, it will be the working interest owners who will initiate the discussion of the need for unitization. Following the informal discussions, if a consensus appears showing an interest in the concept of unitization, then a more formalized structure may be created. At this time all working interest owners regardless of size, should be contacted because it is important to control as much of the unit area as possible in order to receive the maximum benefits.³

When unitization moves from the initial decision phase, a technical committee is usually created in order to develop the necessary geological and technical information that will be needed to make the ultimate decisions regarding the unit agreement. There may be several subcommittees, including a legal subcommittee, to deal with any of the issues that might arise as to the statutory requirements for voluntary unitization approval or compulsory unitization. In addition, the inclusion and contents of pooling or unitization clauses in the leases will also have to be checked, because holdout royalty owners create special problems for unit operations.

In due time royalty owners need to be contacted and informed about the proposed unitization. Even though the lessee might hold the power to commit those

¹ The literature on voluntary unitization is voluminous. See, e.g., 6 P. Martin & Kramer, Williams & Meyers Oil and Gas Law §§ 921.1-921.16 (Matthew Bender) [hereafter Williams Meyers Oil and Gas Law]; R. Sullivan, Handbook of Oil and Gas Law, 337-431 (1955); Doggett, Practical Legal Problems Encountered in the Formation, Operation and Dissolution of Fieldwide Oil and Gas Units, I, II & III, 16 Okla. L. Rev. 1, 124, 189 (1963, 1964); Kirk, Contents of Royalty Owners’ and Operators’ Unitization Agreements, 3 SW. Legal Fdn. Oil & Gas Inst. 19 (1952); Roark, Matters of Mutual Concern to the Layer and Engineer in the Unitization Agreement, 7 SW. Legal Fdn. Oil & Gas Inst. 275 (1956); Williams, The Negotiation and Preparation of Unitization Agreements, 1 SW. - Legal Fdn. Oil & Gas Inst. 43 (1949).
³ See generally Williams, The Negotiation & Preparation of Unitization Agreements, 1 SW. Legal Fdn. Oil & Gas Inst. 43, 72-76 (1949) for the thoughts of an experienced oil-company attorney on the negotiation and preunitization agreement process.
interests to the unit, the royalty owner may still need to be informed.4 Informed royalty owners are less likely to hold out or to fight the proposed unitization. Again, the fewer the hold-outs, the more efficient the unit operations will be.

Although there is some debate about how many different types of unitization agreements there are, the authors agree that unitization agreements are primarily either of the development type or the operational type.5 The development unitization plan presumes early unitization for the person of permitting rapid but systematic development of a reservoir. Some may argue that the exploratory unit should be treated differently than other types of developmental units, but the authors feel that the differences are somewhat minimal, essentially dealing with the greater lack of information on the reservoir. The exploratory unit merely gives the engineers and geologists more lead-time to most efficiently drain the reservoir, without having to worry about individual leasehold operations. The operational unit is one designed to permit some conservation measures to be applied to the reservoir and usually occurs at or near the end of the primary production regime.6 In either event, royalty- and working-interest owners will be attempting to negotiate a unit or unitization agreement that will allow for the unitized development of all or part of the common source of supply. In addition, the working-interest owners will be negotiating a unit operating agreement, which will cover the allocation of drilling and development costs, as well as the delegation of decision-making power to one or more of the working-interest owners. Model-unit agreements and unit-operating agreements are found in Volume 3 infra.7

Obviously the financial and geological information and forecasts that go into the preliminary negotiations for unitization are essential for its ultimate success. Developmental units will have to rely on forecasts as well as information since, by definition, these types of unitization agreements occur before all of the data about the reservoir and its characteristics are well known. The operational unit agreement still requires forecasts, not about the underground conditions that are fairly well known, but about the impact of the enhanced recovery operation that is being planned to increase or maintain production levels from the reservoir.

4 See Amoco Production Co. v. Jacobs, 746 F.2d 1394, 83 O.&G.R. 82 (10th Cir. 1984), in which the Tenth Circuit in a cryptic and poorly written opinion suggests that a lessee who holds the power to unitize the lessor’s interest must seek out the lessor, inform him or her of the negotiations and the terms of the proposed unitization agreement, and solicit his or her input in order to meet the lessee’s good-faith obligations under the unitization clause. Most leases do not authorize the lessee to unitize the lessor’s interest. There are some lease forms in use in the Rocky Mountain area, however, that do empower the lessee to unitize the royalty interest.

5 In Kirk, Contents of Royalty Owners’ and Operators’ Unitization Agreements,” 3 SW. Legal Fdn. Oil & Gas Inst. 19, 24-29 (1952), he describes four different types of unit plans. They are (1) secondary recovery, (2) new developed pool, (3) partially developed pool, and (4) Benton. The secondary recovery plan is self-explanatory; the plan is designed to achieve some form of enhanced recovery project that cannot take place without unit operations. The new developed pool plan is one in which a large number of wells have been drilled according to the appropriate spacing rules, and the plan will be designed primarily to prevent a loss of reservoir pressure so that primary production techniques can be utilized to the greatest extent possible. The partially developed pool plan occurs even earlier, prior to the full characteristics and nature of the reservoir becoming known. Again, the purpose is to end primary production efficiencies through the overall maintenance of reservoir pressure. The Benton Plan provides for unitization immediately after a pool is discovered and is much like the federal exploratory unit in that, as new wells are drilled, participating areas expand and more owners share in the production.

6 Roark, “Matters of Mutual Concern to the Lawyer & Engineer in the Unitization Agreement.” 7 SW Legal Fdn. Oil & Gas Inst. 275, 276-277 (1956).

7 Further examples of model-unit and unit-operating agreements can be found in 7 H. Williams & C. Meyers, Oil & Gas Law § 920.1 et seq. (1988).
In many cases, the various working-interest owners create some form of working committee that develops the information and acts as a conduit for information from the individual operators. It allows for input into the decision-making process from all affected parties, rather than the major owners in the field.

A major concern about the ultimate decision to unitize has to be the extent of the area to be unitized. In most cases, the proponent of the unitization will have preliminary diagrams showing proposed boundaries. Parties to the negotiations may have their own views as to what should be included and what should be excluded. The geological and financial data may drastically change depending on the configuration of the unitized area. If particular parcels are omitted, the entire enhanced recovery project may be rendered geologically or economically unfeasible. Projections and forecasts must be made based on an accurate prediction of what lands will be included within the unit. Owners of essential tracts undoubtedly will hold out for special benefits since exclusion of their acreage will be critical to the success or failure of the unit. This is especially true of operational units in which the underground conditions are well known and the engineers and petroleum geologists can agree on optimum enhanced recovery project. In operational units there is also a tendency to exclude "flank tracts," meaning those tracts that are immediately adjacent to the outside producing wells. A problem arises because these tracts have not been developed, but they still may have value either because of the reserves they contain or because they may be useful in the injection program that is being planned for the unit. In addition, leaving the flank tracts outside of the unit, may allow them to benefit from the enhanced recovery project that will take place within the unit boundaries.

The boundaries problem for a developmental and exploratory unit are somewhat different. For the true exploratory unit in which there is little detailed geological information available, the problems are immense. There are three different ways to attack the boundaries problem for developmental units. The first, which is probably the most unsatisfactory, limits the original unit area to the areas immediately surrounding the existing wells. As new wells are drilled and attain productive capability, they are admitted to the unit. This method has several weaknesses, since there is nothing that can force the operator of the new wells to join the unit. It also loses the potential of drilling the field in the most efficient means possible. The second method is one that has been adopted by the federal government for the creation of exploratory units on federal oil and gas leases. The federal exploratory unit agreement deals with the lack of information by having a widely inclusive unit area boundary but sharing costs and production only from participating areas that are created when wells are drilled and geological information becomes available. Thus, all of the lands that can be reasonably, included in the unit area are included, although the undrilled areas

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8 See Roark, “Matters of Mutual Concern to the Lawyer & Engineer in the Unitization Agreement, 7 SW.Legal Fdn. Oil & Gas Inst. 275, 276-279 (1956).
9 There is also a problem an injection program that uses wells near the external boundaries of the unit area, which may damage the adjacent surface or mineral estate. The problems caused by unitized activities that injure non-unitized lands are discussed at Chapter 23 infra.
10 The three methods of unitization are discussed at Roark, “Matters of Mutual Concern to the Lawyer & Engineer in the Unitization Agreement,” 7 SW. Legal Fdn. Oil & Gas Inst. 275, 276-279 (1956).
11 See § 16.02 supra.
neither share in the benefits or costs of unitized production until such time as a well is drilled, confirming the existence or non-existence of unitized substances. The unit agreement in these cases must be carefully drafted to exclude immediately all barren acreage from the unit as soon as the evidence points to a lack of unitized substances beneath the surface.

The third form of development unit is called the Benton Plan.\textsuperscript{12} Again the unit area is determined to be as broad as possible, given the limited geological information. Unlike the federal exploratory unit, in the Benton Plan unit, all unitized owners share immediately in the costs and production from the unit area. This would include undrilled parts of the unit. The possibility of barren acreage, or acreage that is substantially more or less productive than other tracts, is dealt with by the use of an adjustable participation formula that changes tract allocation as new information is received from the drilling program. In addition, the agreement should allow for the exclusion of acreage proven to be barren as soon as that information becomes available. In many cases, the initial participation formula may be based on surface acreage, changing in time to a multi-factor formula that better represents the underground conditions in the unit.\textsuperscript{13}

While many unitization agreements were originally designed to deal with secondary recovery operations, the true benefits of unitization accrue when the unitization comes as early as possible. Ever since A. L. Doherty began railing against the abominations of the rule of capture and extolling the benefits of unitization, it has become increasingly clear that the earlier the unitization the greater the savings to all parties. In the first annual meeting of the Oil and Gas Institute of the Southwestern Legal Foundation, which was dedicated to the concepts of pooling and unitization, the following questions were rhetorically posed about the costs of not unitizing or unitizing late in the game. They still ring true today:

- Why launch into a competitive and wasteful program of drilling an excessive number of costly wells in a pool, located arbitrarily with respect to surface boundary lines and having no relation whatever to reservoir conditions, when from experience in most every unitized pool half as many wells properly and strategically located with respect to structure are all that are needed to produce a greater quantity of oil at approximately the same or an increased rate of production?

- Why lay duplicate water, fuel and gas gathering systems, build duplicate warehouses and duplicate everything else when ultimately you plan to unitize and will consolidate all such systems and installations?

\textsuperscript{12}See generally Kirk, "Contents of Royalty Owners' and Operators' Unitization Agreements," 3 SW Legal Fdn. Oil & Gas Inst. 19, 28-29, .52-58 (1952).

\textsuperscript{13}See infra § 17.02[5] for a discussion of participation formula.
Why sit by and see the common source of supply ravaged, watch the dissipation of vital natural reservoir energy, hear the vented gas as it goes to the air and suffer all the other disadvantages of competitive cupidity, all with the thought of later going in and, in part only and at great expense, repairing damage that should never have occurred in the first place?

Why wastefully blow gas to the air expecting to later buy back replacement gas at a high figure?

Why follow a program of pressure depletion, followed by an artificial repressuring of the formation?

Why not adopt a program of unitized pressure maintenance instead, making full use of the natural pressure?

Why wait until much of the rich gas is gone to build adequate gas processing and injection facilities, probably at a time when it is no longer economical to do so? Early unitization permits a coordinated development and gasoline plant operation.

Why competitively produce edgewater wells or wells close to water, accelerate channeling or create needless problems of water disposal and pollution when it would be to the advantage of the reservoir to leave such wells shut in or to restrictively produce the same in aid of a possible natural waterflood?14

The need for early and equitable unitization agreements is as important today as it was then and as it was in the 1920’s and 1930’s. Unitization agreements are often difficult to negotiate because of the fractionalized ownership pattern that plagues the oil and gas industry. The more, parties to the agreement, the more difficult it becomes to reach a universally satisfactory solution to the many problems of unitized rather than leasehold development. The following section reviews the API Model Unitization Agreement’s major provisions as how best to resolve some of these difficulties. Not all of the provisions of a unit agreement are discussed and the readers are encouraged to look at the several models of unitization agreements that are provided in Volume 3 infra.

§ 17.02 The Voluntary Agreement – The Major Provisions

[1] The Purposes of Unitization

Most agreements begin with a short, introductory paragraph that states the purpose of the unitization. In this paragraph the general terms and the reasons for the agreement may be set out. If the parties are going to seek either a compulsory unitization order when there are holdouts or state conservation agency approval of the voluntary unit, it becomes

necessary to include in the purposed section a reference to the statutory grounds for which unification can either be approved or compelled. This may merely require that the purpose of the agreement is to prevent waste, promote conservation, increase overall recovery of oil and gas, and protect correlative rights.\textsuperscript{15} In states such as Texas, where the statute limits the purposes for which approval of voluntary unification agreements can be provided, it is very important to make sure that the agreement specifies that the statutory purposes are being achieved by the agreement.\textsuperscript{16}

The API Model Form provides the following for the introductory section:

WHEREAS, in the interest of the public welfare and to promote conservation and increase the ultimate recovery of Unitized Substances from the \[\text{_________}\] Field in \[\text{_________}\] County, State of \[\text{_______}\] and to protect \[\text{_______}\] rights of the owners of interests therein, it is deemed necessary and advisable to unitize the Oil and Gas Rights in and to the Unitized Formation in order to conduct Unit Operation’s as herein provided pursuant to \[\text{[the appropriate statutory citation]}\].

In \textit{Akandas, Inc. v. Klippel}\textsuperscript{16.1} the problem of an inartfully drafted unit agreement led to litigation regarding the interpretation of the instrument the instrument was entitled “Unitization Agreement” and spoke about the “Buffalo Field Unit,” but nothing was said about unitized development other than a listing of the respective percentages of the royalty and working interest owners. The alleged unit encompassed 13 separate leases covering 1,520 acres. Production was obtained on some but not all of the leases. The plaintiffs argued that the agreement was merely a “joint management agreement” that modified the royalty clauses of each lease. They also argued that the habendum clauses of each lease were not modified, since there was no express statement in the agreement dealing with the impact of unit production. Nonetheless, the court concluded that the instrument was a unitization agreement and applied the majority rule regarding the holding of leases by unitized production.\textsuperscript{16.2}

\textbf{[2] Definitions}

The definitions section of the unitization agreement is important because many of the terms used in unitization agreements have different meanings in different contexts. This section usually incorporates by reference documents that legally describe the area limits of the unitized area. Obvious care must be taken that the legal descriptions are accurate and inclusive of all of interest owners who have consented to the unitization. In addition, the section will define what underground formations or reservoirs are covered by the agreement. In cases of voluntary unitization the parties may be free to unitize

\textsuperscript{15} For a discussion of the purposes for which a compulsory unitization may be ordered, see: infra § 18.02[4].
\textsuperscript{16} See infra § 17.03[1] for a discussion of the Texas voluntary unitization statute. See also J. Weaver, \textit{Unitization of Oil and Gas Fields in Texas} 173-200 (1986).
\textsuperscript{16.2} For a discussion of the Kansas rule regarding unit production and habendum clause obligations, see § 20:02[3] infra.
several different reservoirs or common sources of supply, while compulsory unitization
agreements normally must be limited to a single common source in order to comply with
statutory requirements.17 Again, extreme care should be taken to accurately define the
unitized formations that are to be included. Exploratory units have particularly difficult
problems, since the geological information may be lacking when the unit is first proposed,
in drawing an accurate picture of the underground formations that may contain hydrocar-
bons. The API Model Form of Unitization Agreement also contains a definition of “Unitized
Substances” that is most inclusive.18

In Rutherford v. Exxon Co., USA18.1 the problem of identifying the common source
of supply was the heart of the dispute about a voluntary unit agreement. The Rutherfords
had executed a unit agreement covering the Hawkins Field in Texas. The Railroad Com-
misson issued an order approving the unit. Several years later the Rutherfords were
claiming that the unit should be terminated or revoked because Exxon had committed fraud
on the plaintiffs by misleading them as to the existence of a common source of supply. In
this case, Exxon, as the Rutherfords’ Lessee and as unit operator, drilled many more unit
wells on the Rutherford lease than on remaining unit acreage. Exxon justified the drilling
pattern because their engineers and geologists concluded that there was not a single
common source of supply but a number of highly fragmented non-continuous sources of
supply. The Rutherfords’ claims on the merits were not addressed because they filed their
suit more than two years after they knew or should have known of the alleged fraudulent
misrepresentation. As such, their claim was time-barred.18.2

17 See, e.g., Okla. Stat. Ann. tit. 52, § 287.4, which states in part:

The order of the Commission shall define the area of the common source of supply or portion thereof to be included within
the unit area. Each unit and unit area shall be limited to all or a portion of a single common source of supply. Only so much o f a
common source of supply as had been defined and determined to be productive of oil and gas by actual drilling operations may
be so included within the unit area.

On the other hand, North Dakota would allow compulsory unitization of multiple reservoirs under the following statutory
provision - N.D. Cent. Code § 38-08-09.17: The commission… may… hold a hearing to consider the need for the operation as a
unit of two or more pools or parts thereof Separate vertically in one field, and shall have the power to create such a unit and
provide for the unitization and unitized operation of the unit source of supply. “Unit source of supply” means those pools or
parts as designated by order of the industrial commission.

18 See Volume 3 infra. The Model Form states:

Unitized Substances are all oil, gas, gaseous substances, sulphur contained in gas, condensate, distillate; and all
associated and constituent substances other than Outside Substances within or produced from the Unitized Formation.

Outside substances are those that are injected into the formation, presuming that there is an injection program, that are
owned by the working interest owners. In cases where specialized substances are the subject of the unitization agreement
the definition of unitized - substances is even more important, such as in the Bravo Dome Carbon Dioxide Unit in Northeastern
New Mexico where oil and gas are specifically not unitized but carbon dioxide is.

18.1 Rutherford v. Exxon Co., USA, 855 F.2d 1141, 110 O.&G.R. 582 (5th Cir. 1988).

18.2 855 F. 2d at 1144-45. The court also discussed the claim that Exxon owed the Rutherfords a fiduciary obligation, in part, to
avoid the running of the statue of limitations. The court rejected that claim as well. Id. at 1145. For a more complete discus-
son of the relationship between a unit operator/lessee and a lessor, see § 1904[3] infra.
The problems that are created by the use of inexact descriptions are illustrated in Morgan v. Mobil Oil Corp. Morgan involved a consolidated appeal of two district court opinions, one labeled the Morgan controversy and the other the Anadarko controversy. Common to both were unitization agreements covering the vast Hugoton Formation. In Morgan, the trial court had interpreted the unit operating agreement that in this discussion was a unitization agreement involving both working and royalty interest owners, to apply to all formations, not merely the Hugoton Formation. The agreement did not make any specific reference to any particular geological formation. In Anadarko, the agreement likewise did not specify any particular geological formation, but the trial court found that only the Hugoton Formation was unitized. The trial judge bemoaned the lack of clarity of the unitization agreement and thus the need for the court to ascertain the intent of the parties to a 45-year-old instrument. The court's rationale for limiting the agreement to the Hugoton Formation was the close relationship between the agreement and the pro-ration order issued by the Kansas Corporation Commission, which was limited to the Hugoton Formation.

The Tenth Circuit opinion used all of the traditional canons of construction to ascertain the intent of the parties to the agreement. As a matter of contract interpretations, the appellate court was entitled to make a de novo review of the agreement. In addition, the court looked at the agreement as a whole and did not look to extrinsic evidence or isolated provisions of the agreement.

The court's basis for finding that all formations were unitized was a presumption that unless the agreement expressly excludes horizons, the parties intended to include all possible producing horizons. If parties do not want to include all horizons or formations, the definition of unitized formations must expressly exclude those horizons; otherwise all horizons will be unitized.


In Hill v. Heritage Resources, 964 S.W.2d 89 (Tex. App. El Paso 1997), the descriptions given in a joint operating agreement (JOA) regarding the horizons covered was critical in resolving litigation between the operator and certain non-operating working interest owners. Because the JOA only covered horizons to the 20,000 foot level; subsequent AFE's which referred to drilling to the 22,000 foot level did not act to amend the original JOA because the AFE’s were not executed by all of the signatory parties to the JOA. Thus the non-consent election allegedly made by some of the working interest owners was not effective. This meant that the other working interest owners who had supposedly agreed to carry those interests never owned them and thus could not sell them to third parties.

20Anadarko Prod. Co. v. Taylor, 535 F. Supp.103, 72 O.&G.R. 438 (D. Kan. 1982), rev’d, sub nom., Morgan v. Mobil Oil Corp, 726 F.2d 1474,80 O.&G.R. 298 (10th Cir. 1984). The trial judge stated: “A good example of the desired specificity regarding the formation being unitized by agreement can be in the American Petroleum Institute’s Model Form of Unit Agreement. This model unit agreement specifically provides for a description of the gas or oil field to be unitized by geologic name, depth, interval or otherwise.” 535 F. Supp. at 109.


22See generally Jackson v. Farmer, 225 Kan. 732, 594 P.2d 177, 63 O.&G.R. 285 (1979), for a discussion of the four-corners canon. The Anadarko decision, as noted above, was based in part on the Kansas Corporation Commission’s proration order. The Tenth Circuit felt it was inappropriate to consider the proration orders, since the language of the agreements was unambiguous 726 F.2d at 1480-1481.
The nature of unitization agreements gives rise to a constructional performance for including all horizons. Parties to a unitization agreement should, to the extent possible, specify the formations to be unitized. Inclusion or exclusion of formations will have to be negotiated where multiple producing formations are either known or suspected to exist. When there are known separate formations, it may be best to have separate unitization agreements, especially if one is seeking approval by a state conservation agency because most state statutes limit unitization agreements or orders to a common source of supply.

One problem that has arisen when a unitization agreement covers only designated horizons is whether prescription has been interrupted as to the non-designated horizons, under the Louisiana law of prescription liberandi causa. In White v. Frank B. Treat & Son, Inc., the Louisiana Supreme Court held that prescription was interrupted as to both the unitized horizons and the non-unitized horizons. The lease only called for production that was being satisfied by unitized production. Without the unitization it would have been clear that prescription would have been interrupted as to all formations even though the well was only producing from a single horizon. The fact that production has been achieved through a unitization agreement should not change that result.

Another problem that arises when only designated horizons are unitized is the impact of non-unitized production on the leasehold and other obligations of the lessees. For example, where a pooled unit well is drilled to the designated formation but no hydrocarbons are found and is then completed to a producing non-pooled formation, the lessee’s delay rental obligations to the pooled unit lessors is not excused. Likewise, when production is attained from non-pooled or non-unitized formations there is no unit or pooled production sufficient to hold a pooled or unitized lease in the secondary term.

A special problem can arise in unit agreements where there are dual completion wells that are located in both unitized and non-unitized formations. The unitization agreement only unitized the Hunton Lime formation, while the higher Bartlesville Sand formation was excluded. Out of the 737 producing wells existing at the time of unitization, five were

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23 The court concluded: It is difficult to find any word or clause or sentence, which imposes any kind of limitation upon the lessees so long as they drill within the unitized area. This wording can be interpreted to apply to horizontal as well as vertical divisions. There is no language in the 1938 Unit Operating Agreement, which applies specifically to any geologic formation. It is customary and is recommended practice to specify the formations to be included in any unitization agreement. Acknowledging that this is the desired practice, however, is not the same as reading specificity into a contract where it does not already exist. The Unit Operating Agreement of 1938 contains no indication of any intention to limit the lessee’s rights to any horizon. 26 F.2d at 1478.

24 Roark, “Matters of Mutual Concern to the Lawyer & Engineer in the Unitization Agreement,” 7 SW Legal Fdn. Oil & Gas Inst. 275, 283-284 (1956).


26 The Department of the Interior has taken the position that a unitization agreement covering only designated horizons effects a horizontal segregation of the horizons, so that rental and royalty obligations are segregated into unitized and non-unitized portions. W.C. McBride, Inc., GFS 22 (1968).


29 West Edmond Hunton Lime Unit v. Stanolind Oil and Gas Co., 193 F.2d 818, 1 O.&G.R. 462 (10th Cir. 1951) cert. denied, 343 U.S. 920 (1952).
dually completed into both the Hunton Lime and the Bartlesville Sand formations. The unit operating committee, pursuant to the unitization agreement, rendered the owners of the dually completed wells to turn them over to the unit for unitized operation. The working-interest owners refused to do so, claiming that it would cause them to lose a substantial amount of money because they would have to plug the Bartlesville Sand formation and drill a separate well. Without the second well the individual operators would suffer a total loss of production from the non-unitized Bartlesville Sand formation. The 10th Circuit found that upon joining the unitization agreement the parties bound themselves to deliver possession of all unit wells to the unit operator. A decision by the operator or the operating committee to plug off the higher sands for the purpose of implementing the unitized development program was supported by the powers granted it under the unitization agreement. The powers were not exercised arbitrarily, and therefore the wells had to be turned over, even if they were producing from non-unitized formations.30

The failure to unitize all potentially producing formations may lead to conflicts between working interest owners when some, but not all, of the owners attempt to produce hydrocarbons from non-unitized formations. In ANR Production Co. v. Kerr-McGee Corp.,30.1 a secondary recovery unit was formed in the First Bench of the First Frontier Formation. The First Bench was a retrograde condensate reservoir so that pressure had to be maintained above the dew point in order to maintain production. The Unit Agreement and Unit Operating Agreement specifically authorized working interest owners to explore for, and develop, hydrocarbons within the geographic boundaries of the unit, but in different formations. ANR, a non-operator, sought permission from the Unit Operator to drill a well into the Second Bench formation, located some forty to fifty feet below the First Bench. ANR notified the Unit Operator and other working interest owners that it would use the same drilling techniques on the proposed well as it had on two other wells, located outside of unit boundaries, to test the Second Bench. Permission was granted and the well was drilled, but ANR used a hydraulic fracture technique it had not previously used. Production was obtained but shortly thereafter the Unit Operator determined that the well was in communication with the unitized First Bench and requested that ANR cease production. ANR refused but eventually was forced to shut in the well by the Wyoming Oil and Gas Conservation Commission because production was violating the correlative rights of the unit’s owners.30.2 In this action the Unit Operator was seeking monetary damages for the period of time during which the offending well produced unitized substances.

The major issue on appeal was the dispute between the two parties’ expert witnesses on whether or not there was communication between the First and Second Bench, and if so, to what extent did the offending well drain unitized substances. The trial court had largely believed the Unit Operator’s expert who had concluded that it was physically possible for there to be communication between the two reservoirs. They also accepted the

30.2 ANR Production Co. v. Wyoming Oil and Gas Conservation Commission, 800 P.2d 492, 111 O.&G.R. 392 (Wyo. 1990) discussed at § 5.01 [4][h], § 11.05 [4][h], § 11.05 [4], [5] supra and § 25.06 [25][d] infra.
Unit Operator’s model for determining the volume of production. Thus ANR had converted
gas that belonged to the unit and was liable for its value plus pre-judgment interest. The
court, however, did not apply the provisions of the Wyoming Production Payment Act as it
relates to statutory interest and attorney’s fees. ANR did not have a prior legal obliga-
tion to pay the Unit Operator for the hydrocarbons, since it had no right to take those hydro-
carbons in the first place. Without the preexisting legal relationship the Act did not apply.


These are normally the operative sections of the unitization agreement. They create
the unit, set forth its impact on the participating interests, and avoid some legal traps for the
unwary. Initially the agreement will provide that all of the parties have agreed to unitize their
interests so that in the future the parties will be treated as if they had signed one lease
covering all of the unitized area. A second provision usually attempts to conform all leases
and other instruments that previously existed to the terms of the unitization agreement.
Specific language is also included that allows unitized production to continue all affected
leases or term interests into the secondary term. Normally included in this section is a
provision expressing the parties’ intent not to cross-convey any interests; this is because of
the many problems that arise from treating the unitized interests as being cross-conveyed.

The API Model Form uses the following language to avoid the cross-conveyance rule:

Titles Unaffected by Unitization. Nothing herein shall be construed to result in
the transfer of title to Oil and Gas Rights by any party hereto to any other party or to
Unit Operator.32

This provision was instrumental in the Wyoming Supreme Court’s conclusion that
the unit operator was not an assignee of a lessee for purposes of requiring the unit opera-
tor to pay all ad valorem taxes, including delinquent payments plus interest. Wyoming
sought to re-assess the ad valorem taxes for the Madden Deep Unit, a federal unit encom-
passing federal, state and fee lands. It brought a single action against the unit operator for
the alleged delinquencies of all of the non-operators’ working interests. The court found that
under the relevant state taxation statute the unit operator was not a taxpayer, except to the
extent it was an owner of a working interest. There was no assignment of a property inter-
est to the unit operator by virtue of the provision cited above. The relationship between the
unit operator and non-operator working interest owners was contractually based, not based
on some type of co-tenancy interest.

The provisions rejecting the cross-conveyance doctrine are important in today’s
natural gas market. When combined with the provisions of the unit operating agreement
requiring each working interest owner to market its own share of production, they tend to
defeat claims that the unit operator is converting the non-operator’s gas where the

31 The Cross-conveyance doctrine and its ramifications are discussed at Section 19.01[1] infra.
32 API Model Form § 3.5 found in volume 3 infra.
non-operator is unable or unwilling to sell its share of production. Such a result was reached in *Doheny v. Wexpro Co.* \(^{32.2}\) Several non-operators to a unit operating agreement alleged that they were entitled to balance in cash where the operator was selling gas, but where they were either unwilling or unable to sell their share of the gas being produced by the unit. The court rejected their claim to balance in cash, following the widespread judicial preference to balance in kind unless the agreement or the equities dictate otherwise. \(^{32.3}\) The non-operators had claimed that they were tenants in common with the operator, which would entitle them to balance in cash. The court rejected the argument that the unit agreement’s provision relating to allocation of production created a tenancy in common. The allocation of production provision merely related to determining each party’s share, which would – under the agreement’s express language – be separately disposed of by each party having the right to take in kind. Thus the parties to the unit agreement and unit operating agreement were deemed not to be tenants in common.

*Doheny* also illustrates the wisdom of incorporating within unit operating agreements a gas balancing provision to deal with the likelihood that each owner will either be unable or unwilling to take in kind their allocated share of production on a regular basis. Especially as it relates to unit production of gas where the owners are unable to store the production on-site, it is quite probable that not all owners will be able to sell their share of production. Setting up the appropriate accounting methodology, providing a database for over and under production figures, and limiting overproduction levels, and limiting the time period in which to remedy an under-produced condition are all matters that need to be addressed. In addition, pricing mechanisms to deal with cash balancing, when and if authorized, should be agreed to rather than left to subsequent judicial determination at the culmination of the litigation process.

The effect of creating a unit may extend beyond the signatory parties. In *Tennessee Gas Pipeline Co. v. Lenape Resources Corp.* \(^{32.4}\) a pipeline purchaser was attempting to limit its take-or-pay obligation by excluding from the deliverability calculation, production from unit wells that were outside of the areas that had originally been dedicated to the contract. The court noted that under the terms of the gas purchase contract, Tennessee was obligated to take gas from the seller’s leases as well as from areas, which were unitized with the seller’s leases. Thus, unit production, even if off of the original leases owned by the seller, would still constitute part of the deliverability calculation for determining the purchaser’s take-or-pay obligation.

An important provision that is omitted from several of the model agreements is a choice of law provision. The provision would avoid problems where either the substantive or procedural laws are different in the two or more states that may be included within the boundaries of a particular unit. Again, the parties to a multi-state unit agreement are better

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\(^{32.2}\) *Doheny v. Wexpro Co.*, 974 F.2d 130, 122 O.&G.R. 227 (10th Cir. 1992).


\(^{32.4}\) *Tennessee Gas Pipeline Co. v. Lenape Corp.*, 925 S.W.2d 565 (Tex. 1996).
of deciding for themselves the appropriate choice of law, rather than having a court choose the applicable law after litigation have been instituted.32.5


In most situations the working-interest owner with the largest interest in the unit area will be designated unit operator. The provisions relating to how the unit is operated are not set out in detail in the unitization agreement, but the provisions are normally spelled out in great detail in the unit operating agreement. The unitization agreement paragraph designating the unit operator will usually refer to the unit operating agreement as governing the day-to-day operations of the unit. In addition, the API Model Form also provides the initial development or operational plan for the unit, which is subject to change under the provisions of the unit operating agreement. The API Model Form suggests the following:

Unit Operator. Working Interest Owners are concurrently herewith entering into the Unit Operating Agreement, designating _______________ as the initial Unit Operator. Unit Operator shall have the exclusive right to conduct Unit Operations, which shall conform to the provisions of this agreement and the Unit Operating Agreement. If there is any conflict between such agreements, this agreement shall govern.33

The designation of a unit operator can have ramifications relating to the payment of state taxes owed by the individual working interest owners, as seen in a series of cases involving the Madden Deep Unit in Wyoming.33.1 In the first case, the state was seeking to collect an alleged deficiency in payment of state severance taxes owed by an individual non-operator from BHP, the unit operator. Under the unit operating agreement, each of the working interest owners retained complete ownership rights in their pro rata share of unit production. They also retained the complete power to market and sell their aliquot share. The statute imposed the severance tax liability on “Any person extracting valuable products.” 33.2 BHP argued that since it did not own the gas of the other working interest owners, it was not extracting under the terms of the statute. It determined that as an operational matter, BHP extracted the gas and therefore could be held liable notwithstanding its lack of ownership of that gas. The court opined that BHP could resort to whatever remedies were available to it under its agreements with the other working interest owners, including set-off

32.5 In Amoco Rocmount Co. v. Anschutz Corp., 7 F.3d 909 (10th Cir 1993), cert. Denied, 510 U.S. 1112 (1994), the unit agreement chose Colorado law as applicable which had a significant impact on the issue of whether prejudgment interest was an available remedy in a breach of contract action.
33 API Model Form 4.1 in Volume 3 infra.

Another problem facing the unit operator will be paying taxes to multiple jurisdictions. In Shell Western E&P, Inc. v. Dolores County Bd. Of Comm’rs, 948 P.2d 1002 (Colo. 1997), the unit operator apparently mistakenly forgot to attribute unit production reports and was not assessed a county mineral production tax. The court found that the unit operator could not rely on the six-year statute of limitations to avoid back taxes because it had an affirmative duty to report the production to the county and thus would have benefited from its failure to comply with a mandatory duty.
33.2 Wyo. State § 39-6-307 (e).
or liens, should the working interest owners not reimburse BHP for their proportionate share of any severance tax deficiency.

In the second case, Wyoming sought to retroactively increase the amount of ad valorem tax assessment for the mineral interests located within the Madden Deep Unit, after it conducted an audit of the Unit. The state sought the alleged delinquent tax payments, not from the individual working interest owners, but from the unit operator. The issue was whether the unit operator was an “assignee” of the lessee because the ad valorem tax statute made such assignees liable for the ad valorem tax.\textsuperscript{33.3} In interpreting the unit operating agreement, the court found no assignment of the individual leasehold interests to the unit operator. The court framed the non-operator/operator relationship as analogous to a principal/agent contractual relationship. While the unit agreement and unit operating agreement give the unit operator extensive exploration, drilling and management powers, the operator is not given a property interest in the minerals in place.\textsuperscript{33.4} Quoting from the unit operating agreement which states: “Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement…,”\textsuperscript{33.5} the court concluded that the unit operator does not own all of the Unit’s production. Each party to the agreement continues to own its own pro rata share of Unit production. The court distinguished the earlier cases dealing with severance taxes,\textsuperscript{33.6} because the severance tax statute imposed liability on the person who extracted oil or gas which comes within the powers of the unit operator. In this case, the unit operator did not own the gas and therefore could not be directly responsible for the payment of the ad valorem tax. The court noted that the state could still send the entire tax bill to the unit operator who might be contractually obligated to make payments for the non-operators, but the state could not sue the operator for any non-operator delinquency under the terms of the ad valorem taxation statute.

While most unit agreements allow the working interest owners to take in kind unitized substances; the Cotton Valley Unitization and Pressure Maintenance Agreement in Arkansas delegates the responsibility of negotiating and selling natural gas to the unit operator.

In \textit{Louisiana Nevada Transit Co. v. Marathon Oil CO.},\textsuperscript{33.7} the gas purchaser sued Marathon, the unit operator, for allegedly wrongfully terminating the gas purchase contract. Marathon’s authority to sell unitized gas resulted from a contract between Marathon and the Cotton Valley Operators’ Committee on behalf of all the working interest owners. This unique situation worked to the plaintiff’s disadvantage since under the facts of the case they had failed to take or pay for natural gas which triggered the seller’s right to terminate the entire contract.

\textsuperscript{33.3} Wyo. Stat. § 39-33-101(d).
\textsuperscript{33.4} See § 17.02[3] supra for a discussion of the cross-conveyance doctrine and unit agreements.
\textsuperscript{33.5} 856 P.2d at 432.
\textsuperscript{33.6} BHP Petroleum Co. v. State, 784 P.2d 621, 105 O.&G.R. 661 (Wyo. 1989)
\textsuperscript{33.7} Louisiana Nevada Transit Co. v. Marathon Oil Co., 770 F. Supp. 325 (W.D. La. 1991), aff’d 985 F.2d 797, 126 O.&G.E. 37 (5th Cir. 1993).
In *Exxon Corp. v. Jarvis Christian College*, Exxon, as unit operator of the Hawkins Field, had utilized pricing policies for unitized crude oil production which were found to violate the then extant federal oil pricing regulations. Exxon eventually paid the United States over $2 billion in overcharges and interest. It then sought contribution from other unit owners, both working and royalty interest owners, on a pro rata basis. It alleged that there was an implied private cause of action that arose out of the federal oil pricing regulations. The court did not find an implied statutory private cause of action. Instead it found that as a matter of federal common law, Exxon had the right to seek reimbursement because of the unique federal interests in the pricing scheme. The United States sued only Exxon, because it was too much of an administrative burden to sue the many individual interest owners in the unit. It would have been manifestly unfair to disallow Exxon to seek reimbursement merely because the government chose to single it out as a matter of expediency. While giving Exxon the right to sue, the court found that as to the royalty owners, Exxon was collaterally estopped from seeking reimbursement. The court suggested that Exxon probably owed the royalty owners a “quasi-fiduciary” duty, which at a minimum required Exxon to act as a reasonable and prudent operator. The court found that Exxon’s actions in determining crude oil prices fell below that standard. The royalty owners were not part of the decision making process and had merely been informed of the decision to ignore an administrative ruling that found that the prices had been set too high.

In *Jarvis Christian College*, the court did not look at the unit agreement or unit operating agreement to determine if there was any express standard of conduct set forth to define the duties of the unit operator. In *Oryx Energy Co. v. Tatex Energy*, the unit operator sought declaratory relief that it was not liable for the plugging of a well and the termination of a lease that had previously been committed to the unit. The Unit Operating Agreement set forth the following standard for unit operator actions vis-à-vis non-operators: “Unit Operator shall not be liable to any party for anything done or omitted to be done by it in the conduct of operations hereunder except in case of bad faith.” While the operator was otherwise required to conduct itself as a reasonable and prudent operator, the court found no inconsistency between the dual objective and subjective standards of care. It also found that there was no evidence of bad faith actions, and therefore granted the operator’s motion for summary judgment on its require for declaratory relief.

While the typical unit operating agreement vests the operator with substantial authority to make operational decisions – typically subject to some monetary cap – without getting unit approval, many joint operating agreements require approval by the non-operators before any “reworking” operations may be undertaken. In *Roemer Oil Co. v. Aztec Oil & Gas Corp.*, a dispute arose regarding whether a particular operation triggered the need for non-operator approval. Citing the first edition of this Treatise, the court concluded that the term only had meaning within a particular factual context and therefore the trial

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33.9 See § 19.04 [3] infra for a discussion of the relationship between a unit operator and royalty interest owners.
33.11 779 F. Supp. at 146.
33.12 *Roemer Oil Co. v. Aztec Oil & Gas Corp.*, 886 P.2d 259 (Wyo. 1995).
In Amoco Rocmount Co. v. Anschutz Corp., the unit operator was sued for allegedly breaching an express provision of the unit operating agreement requiring working interest owner approval before the operator could “make any substantial change in the basic operation of the Plant, any well or any Unit facility, except in the case of an emergency.” Amoco, the unit operator, allegedly chose to lower the level of production to better its bargaining position with the working interest owners for its proposed operational changes. Amoco alleged that under the standard unit operating agreement limiting its liability to acts of gross negligence or willful misconduct, it should not be liable. The Tenth Circuit concluded that the lowered duty does not apply to a breach of an express duty contained in other provisions of the unit operating agreement. An exculpatory clause, such as the one used in the unit operating agreement, does not shield the unit operator from liability for an intentional breach of an express duty.

The API Model Form Unit Operating Agreement expressly provides that if there is a conflict between the terms of it and the Unit Agreement, the language of the Unit Agreement prevails. Where there are multiple documents relating to unit operations, it is wise to include a similar provision to avoid problems. In Torch Operating Co. v. Louis Dreyfus Reserves Corp., there was a conflict between a provision in the COPAS exhibit to an operating agreement and a provision in an individually negotiated service agreement. The COPAS provision authorized the operator; or the operator’s licensee, to charge the non-operators for certain expenses relating to the use of land-based facilities in support of the offshore platform. The services agreement did not allow the operator to charge for overhead, general administrative costs, or the operator’s own operations. Applying the canon of construction that typewritten provisions prevail over preprinted provisions, the court disallowed the operator’s charges.

[5] The Participation Formula

[a] The Initial Participation Formula

The participation formula is the heart of the unitization agreement. It is usually the most difficult problem to solve, but unitization is impossible until it is agreed upon by all of the parties concerned, especially the working interest owners. The formula determines the portion of the unitized substances each participant is to receive, and it is usually arrived at after long and laborious negotiation. The ideal solution would allocate production so that each working interest owner’s share of production from the unit would be in exact propor-

33.13 886 P.2d at 262-63.
33.15 3 F.3d at 922.
34 See also Doggett, Practical Legal Problems encountered in the Formation, Operation and Dissolution of Fieldwide Oil and Gas Units, 16 Okla. L. Rev. 1,52-58 (1963); Roark, Matters of Mutual Concern to the Lawyer & Engineer in the Unitization Agreement, 7 SW. Legal Fdn Oil & Gas Inst. at 287-299.
tion to the value of the interest that each working interest owner contributes to the unit. The relative value of each working interest owner’s contribution is not merely based on the amount of hydrocarbons that may underlay his or her estate. Therefore, value is determined not only by productive acre-feet of oil and gas in place but by such additional factors as location on the structure, amount of production already attained, number of existing wells, and money invested in existing production facilities.

But the attainment of the ideal participation formula that exactly mirrors each working interest owner’s share of the value of the entire unit is impossible. The information concerning the reservoir is likely to be limited, even where there has been substantial primary development. Predictions of future reservoir behavior are also difficult to make and are subject to many variables, any of which might change each owner’s proportionate share. External factors, such as market price of the hydrocarbons, also render an ideal participation formula impossible to achieve.

The formula, however imprecise it may be, is usually reached through the give and take of long and hard negotiation sessions between the working-interest owners. With the advent of computers, working-interest owners are capable of analyzing complex formulas in a short period of time to determine the effect of the proposed formulas on their individual interests. While, by definition, some working-interest owners will receive more than their proportionate value and some will receive less, even the losers on the formula finally chosen will become net winners, because overall production will be substantially increased over the levels that would have been achieved from non-unitized production. While the share is smaller, the pie becomes bigger and therefore a consensus can hopefully be reached among the working-interest owners.

The process of developing a formula may vary from unit to unit. The engineers and geologists must have an important role, at least in the beginning of the process, because they are responsible for developing information about the characteristics of the reservoir. Since most reservoirs vary in thickness, pressure, porosity, and other factors, there can be considerable negotiations between the parties as to the data and projections used to develop the facts upon which the ultimate allocation decision is reached.35 The engineers and geologists try to determine the economic value that attaches to each of the leasehold estates that will be committed to the unit. Relative values are often the function of various factors: the two most important are the estimate of the total reserves in place and the source of the reservoir pressure combined with the location of the tract in relationship to the source of the pressure. Before one can arrive at any kind of allocation formula, the relative economic values for the entire unit must be evaluated in detail.36

36 Roark, Matters of Mutual Concern to the Lawyer and Engineer in the Unitization Agreement., 7 SW. Legal Fdn Oil & Gas Inst. 275, 287-288, (1956).
While not exhaustive, Professors Williams and Meyers have listed nine factors that are often relevant in arriving at a negotiated participation or allocation formula. They are:

1. The drive mechanism available in the field;
2. Well productivity;
3. Well density;
4. Effect of proportioning;
5. Acre feet of productive formation;
6. Oil initially in place beneath a tract;
7. Extent and accuracy of information that has been obtained as a result of securing electrical logs, coring, testing;
8. The extent of penetration into the producing formation;
9. The current allowable formula.37

Each individual unitization agreement must be considered unique. There should never be a model or standard or ideal participation formula. The formula must fit the specific circumstances for the proposed unit. The criteria listed above, however, represent the breadth of the problems confronting those who seek to unitize a common source of supply. *Gilmore v. Oil & Gas Conservation Commission* 38 is illustrative of the complexity of achieving a participation or allocation formula. In *Gilmore*, an attempt was made to unitize the Hartzog draw field, which included approximately 31,000 acres. There were more than 80 working-interest owners located within the field, which had at least 177 producing wells located therein. This operational unit agreement was designed to deal with the loss of primary production capabilities due to a loss of reservoir pressure. In developing the participation formula the working-interest owners looked at 71 formulae before ending up with an 11-factor formula that still only received support of 75.89% of the working-interest owners.39

Besides merely identifying the factors to be included in the formula the parties must also agree on the relative weight to be given each factor. As the number of factors increases, the relative weight becomes more important to individual tracts, and the negotiation process becomes more difficult. The final participation formula that was agreed to in *Gilmore* used the following factors with their relative weight:

1. Usable Wells 5.00%
2. First Six Months Production 24.25%
3. Peak Rate 2.50%
4. Wellbore Net Feet 7.50%
5. Last Three Months Production Ending March 31, 1979 1.50%
6. Last Six Months Production Ending March 31, 1979 1.75%
7. Remaining Primary 14.50%

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39 Under Wyo. Rev. Stat. § 30-5-110(f), the unitization agreement could only be approved by the commission if it had been ratified by at least 80% of the working-interest owners. Under certain hardship conditions, the commission could lower that ratification figure to 75%. The unit operator requested the hardship exemption, which the commission granted.
The fact that it took more than three years to develop this participation formula that still could only muster slightly over 75% approval by the working-interest owners, suggests that the process of negotiating participation formulas has been rendered more difficult by the technological and geological advances of the past decades, which makes it possible to develop multiple scenarios and specific percentages for each individual owner based on the variables presented by the different factors and the different weights attributed to each factor.

This is a far cry from the early days of unitization in which the formula, more often than not, was based on surface acreage. However, in unitization agreements in which some measure of the amount of reserves located beneath the acreage will have to be formations are rarely uniform in quality and thickness throughout the unit with each tract having a different amount of reserves per acre, the surface acreage allocation formula loses its cloak of fairness.

Surface acreage may still be used in determining an allocation formula in unitization agreements, but it is unlikely to be the sole factor utilized. In most cases, included. For example, in Woody v. Corporation Commission, a formula allocating production was weighted 50% for surface acreage and 50% for saturated hydrocarbon pore space. While some of the earlier unitization agreements tended to use relatively simple formula with few factors, that is not to say that all earlier agreements were without the problems faced by working-interest owners in the Gilmore case. For example, the unitization agreement dealing with the Seeligson Field in Texas that was negotiated in the early 1950's exhibited many of the same characteristics seen today.

In the Seeligson Field, a designated Engineering Committee took more than three years to develop the data and work on a proposed formula. The committee was assisted by a paid engineering staff, which had been kept intact from a previous successful attempt to unitize another gas field. The staff was instructed to determine the acre-feet of oil and gas sands in the several productive horizons. It was the staff’s work that led to the committee’s recommendation to a meeting of the working-interest owners. The committee reported that it had not been able to work out a final formula because even among the engineers there was some dispute relating to the technical data on the amount of interstitial

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40642 P.2d at 775. The court says there are eleven factors, but it only lists ten factors that do not add up to 100% insofar as the weighting is concerned. Obviously the eleventh factor was inadvertently omitted from the list that was published. Because the court discusses a problem relating to the accuracy of a survey, it is not unreasonable to infer that the missing factor may be surface acreage. The two figures relating to porosity acre-feet and developed porosity acre-feet were developed by multiplying the surface acres of the tract by the thickness of the productive sand underneath that tract. Substantial geological information must be available in order to use a porosity acre-feet factor. 642 P.2d at 780-781.


42In Eason v. Corporation Commission, 535 P.2d 283, 51 O&G.R. 203 (Okla. 1975), the Corporation Commission in its compulsory unitization order used a five-factor participation formula to this product.
water and the amount of total gas recovery. The working-interest owners who were aware
of these problems took the recommendation and adopted a lengthy and complex participa-
tion formula. It provided as follows:

Article IV – Determination of Participation: The percentage of participation of each tract in the Seeligson Field was determined as follows:

First multiplying each tract’s participation in the oil in the Seeligson Field by the ratio of the value of the oil to the value of both oil and gas in the Seeligson Field and adding the result obtained by multiplying each tract’s participation in the gas in the Seeligson Field to the value of both oil and gas in the Seeligson Field. This procedure is mathematically accomplished as follows:

<table>
<thead>
<tr>
<th>Tract participation in Seeligson Field</th>
<th>Participation in oil (X)</th>
<th>Participation in gas (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>value ratio of oil (X)</td>
<td>value ratio of gas</td>
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</tbody>
</table>

The participation of each tract in the oil in the Seeligson Field was determined by adding B of the tract’s acre-foot participation in the oil to 2 of the tract’s production participation in the oil. (a) Each tract’s acre-foot participation in the oil was determined as follows: each tract participates in each oil zone in the Seeligson Field on the basis of its percentage of adjusted oil acre feet therein. Each zone participates in the total Seeligson Field oil on the basis of its percentage of oil production from the Seeligson Field during the last half of 1954. A tract’s acre-foot of oil participation attributable to a zone is determined by dividing the tract’s adjusted oil acre feet by the total zone adjusted oil acre feet, and then multiplying this result by the ratio of the zone oil production for the last half of 1954 to the total oil produced in the Seeligson Field for the same period. This is accomplished mathematically as follows:

\[
\text{Tract acre-foot participation} = \frac{\text{Tract-zone adjusted oil acre feet}}{\text{Zone adjusted oil acre feet in Seeligson Field}} \times \frac{\text{Zone oil production from Seeligson Field}}{\text{Total oil production from Seeligson Field}}
\]

The tract acre-foot participation factors so determined for each zone are then added together to arrive at the tract’s final acre-foot participation in the oil of the Seeligson Field. (b) Each tract’s production participation in the oil was determined as follows: Each tract participates in the oil in the ratio that the actual production of oil from such tract (from above the base of Zone 20-C4) during the last half of 1954 bears to the total production of oil from the Seeligson Field during the last half of 1954, except that for the purpose of determining such participation any tract that was without actual production during such period but that was covered by a non-drilling oil and gas lease or agreement is given a
portion of the production of oil from the adjoining producing tract (from above the base of Zone 20-C4) during the last half of 1954, in the relative proportion of the total adjusted oil acre-feet above the base of Zone 20-C4 underlying each of the two tracts. Each tract’s participation in the gas was determined as follows: The respective percentage of participation in gas of each tract was calculated by taking the arithmetic average of the following factors with reference to gas only: (a) The volume of gas originally in place under each respective tract expressed as a percentage of the total volume of gas originally in place within the Seeligson Field. (b) The barrels of 180-butane and heavier products originally in place under each respective tract expressed as a percentage of the total barrels of 180-butane and heavier products originally in place within the Seeligson Field. (c) The volume of residue gas (calculated from the volume of gas originally in place remaining after the extraction of the 180-butane and heavier products and after deducting for plant fuel) under each respective tract expressed as a percentage of the total volume of residue gas so calculated within the Seeligson Field. For the purposes only of the determination described in this Article IV, the term “oil” shall be deemed to include oil, solution gas, and the gas liquids associated therewith, and the term “gas” shall be limited to gascap gas and non-associated gas and the gas liquids associated therewith. The complexity of the Seeligson Field participation formula is a product of the size of the field, the number of working-interest owners, the diversity of underground reservoir conditions, the highly developed nature of the field, and numerous other conditions unique to the field. The fact that it took three years to develop an acceptable participation formula is strong evidence of the difficulty in dealing with this aspect of the unitization agreement.

[b] Subsequent Changes in Allocation

In addition to the initial tract participation figures, most unitization agreements provide for changes due in the unit area based on new information. Provision for enlargement has been called “essential to practically every unitization agreement.”43 Issues such as the conditions precedent to enlargement or shrinkage should be addressed. Time limits may be placed on the changes in the unit area in many cases. These may include a period of time after creation of the unit in which no changes are to be allowed. Another time limit may close the opportunity to expand or contract the unit after a certain time. In others, such as the Benton Plan, changes are based on the development of more acreage and the acquisition of more data about the underground reservoir. The API Model Form takes tacit approach to the problem of enlargement by not placing a time limit on expansion and by insuring that the relative-tract participation ratios are not changed by expansion of unit area boundaries. In addition, the Model Form denies any retroactive effect to the expansion of unit area boundaries. The Model Form provides in part:

Enlargement of Unit Area. The Unit Area may be enlarged from time to time to include acreage reasonably proved to be productive upon such terms as may be determined by Working Interest Owners including but not limited to the following:

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43 Roark, “Matters of Mutual Concern to the Lawyer & Engineer in the Unitization Agreement,” 7 SW. Legal Fdn Oil & Gas Inst. 275, 286 (1956) (Rd.II-IV189 Pub.4*).
12.1.2 The participation to be allocated to the acreage shall be fair and reasonable, considering all available information.

12.1.3 There shall be no retroactive allocation or adjustment of Unit Expense or of interests in the Unitized Substances produced, or proceeds thereof; however, this limitation shall not prevent ad adjustment of investment by reason of the enlargement. 44

Under certain circumstances, unitization agreements may provide for adjustment of tract participation formulas even when there is no change in the size of the unit. One of the reasons one may need to adjust tract participation formulas and also include a time limit on these changes is reflected in the Louisiana case of Texaco, Inc. v. Vermilion Parish School U Board.45 A voluntary agreement for the Erath Field was signed in 1942 for the purpose of engaging in a gas-recycling operation. The agreement adopted an acre-foot formula for tract participation that was last revised in 1944. About twelve years later a new and deeper horizon was found to be productive of hydrocarbons. One of the issues facing the court was whether the acre-foot formula was to be applied to this new horizon.46 The court was faced with three alternatives:

1. Apply the 1944 acre-foot formula to all production regardless of which horizon it came from;
2. Recalculate the acre-foot formula to deal with the productive acre-foot findings regarding the new horizon, and keep the old formula intact for continued production from the original horizon, or
3. Recalculate the acre-foot formula by combining the acre-foot findings from both the new and the original horizons.

The trial court and the Court of Appeals chose the second option, while the Louisiana Supreme Court opted for the third. The result is certainly defensible, but it suggests the need for careful drafting of the unitization agreement to avoid having a court choose a participation or allocation formula upon the discovery of a new producing horizon.

Changes in allocation among parties to a unit agreement can be accomplished by a change in the allocation formula or by an expansion or contraction of the unit. In BHP Petroleum Co. v. Okie,46.1 Okie negotiated an individual agreement with BHP, the unit proponent and subsequent unit operator, in exchange for the commitment of her mineral interests to the Madden Deep Unit, a largely federal exploratory unit. The agreement authorized Okie to participate in any decisions affecting the development of the Unit. BHP admitted that it failed to notify Okie that it was seeking to increase the size of the participating area sur

44 API Model Unit Agreement Article 12 in Volume 3 infra.
46 The court first found that the unitization agreement extended to the new horizon even though it was not specifically mentioned in the agreement. See supra § 17.022 [2].
rounding a particularly prolific well from 2560 to 4000 acres. This change would have cost Okie approximately $11,000 in lost royalties. Okie sued, but waived her right to seek damages. The court agreed that BHP had breached its agreement with Okie by failing to notify her of the proposed change and giving her a chance to approve or disapprove. However, the court reversed the trial court’s issuance of an injunction ordering BHP to pay royalties at the pre-expanded participating area levels since that was a form of monetary damages to which Okie had specifically waived her right. The court could not issue an injunction to provide what was clearly an adequate legal remedy.

In Amoco Production Co. v. EM Nominee Partnership, the contraction of a unit by the BLM caused the owner of an overriding royalty interest to lose its royalty from the unit well. BLM had issued an order that retroactively contracted the size of the unit, excluding the lands burdened by the plaintiff’s overriding royalty. The lessee brought an action against the overriding royalty owner seeking reimbursement for royalties wrongfully paid. The court did not get to the merits of the claim, deciding solely that the defendant’s ties with the state, through its ownership of an overriding royalty, were sufficient under the Due Process Clause to allow for the exercise of in personam jurisdiction.

Most unit agreements have a specific provision regarding how the boundaries of the unit may be expanded or contracted and what are the ramifications of such a change. In Chevron U.S.A., Inc., the issue was how the unit agreement (a federal exploratory unit agreement) authorized the parties to contract the unit. One provision of the unit agreement allowed the parties to vote to contract by excluding lands not within an existing participating area. Another provision authorized the parties to contract the unit by excluding lands not reasonably proven to hold oil or gas. The unit operator and other working interest owners representing 90% of the owners voted to contract, by limiting the unit agreement to a certain depth. The deeper horizons were all physically located within the single existing participating area. The Board agreed with BLM that the only way those deeper horizons could be excluded would be to amend the unit agreement to eliminate the restriction relating to participating areas. Amendment of the unit agreement requires unanimous consent, which obviously was not obtained, and thus the agreement could not be restricted to the newly designated horizons.

The difficulties that accompany attempts to recalculate participation formula, especially when the recalculation is to be retroactively applied, are illustrated through the unit agreement that governs the operation of the Naval Petroleum Reserve Number 1 in Elk Hills, California. The Elk Hills Field was the first area set aside for a naval petroleum reserve through an executive order issued in 1912. Because Standard Oil of California owned about 20% of the land and 33% of the reserves, the federal government had the

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46.4 This narrative is taken in large part from Chevron U.S.A. Prod. Co. v. O'Leary, 958 F. Supp. 1485 (E.D. Cal. 1997). A brief history of the naval petroleum reserve program, including the Elk Hills Field is given at ABA, Conservation of Oil and Gas - A Legal History 1948, 622-25 (1948).
choice of buying it out through condemnation or developing a unit plan for joint control and operation of the Field. After many years of negotiation, a unit plan was executed by both parties in 1942.\footnote{ABA, Conservation of Oil and Gas - A Legal History 1948 at 628.} Over fifty years later this unit plan was the subject of litigation as Congress authorized the sale of the federal government’s interest in the Elk Hills Field.\footnote{Chevron U.S.A. Prod. Co. v. O’Leary 958 F. Supp. At 1490-91, citing the National Defense Authorization Act for Fiscal Year 1996, Pub. L. No. 104-106, 110 State. 631.}  

The unit agreement created participation percentages based on the acre-feet of oil and gas underlying each of the party’s respective lands in four separate zones. The agreement allows for revisions from the original participation percentages for each zone through a complicated process starting with a request to an Engineering Committee that the percentage be revised. The Committee is composed of governmental and private sector representatives. It reviews the relevant data, applies various performance standards set out in the unit agreement and, if unanimous, revises the participation percentages on a retroactive basis. On two occasions, in 1949 and 1957, the Engineering Committee was unanimous in support of requested revisions of the Shallow Oil Zone which left the participation formula as allocated 70.0119% of the production to the federal government, and 29.9881% to Chevron. If the Engineering Committee is not unanimous, the request for a revision is set to the Secretary of the Department of Energy who has wide discretion to make the requested revision, change the requested revision or maintain the status quo. She has the authority, as well, to select an independent petroleum engineer to prepare an advisory report. After the preparation of this advisory report, the Secretary must make a decision.

In this case Chevron, in June 1995, submitted evidence to the Engineering Committee to revise the participation formula giving it a higher percentage. DOE responded by submitting evidence giving it a higher percentage. An advisory report was sought and its recommendation favored the Chevron position, although Chevron’s participation percentage would be less than the amount for which Chevron had argued.\footnote{958 F. Supp. at 1490.  Chevron’s requested revision would increase its share from 29.9881% to 35.0619% while the advisory report recommended an increase to 34.2214%. since the revision would apply retroactively to all production since 1942, even small percentage differences would amount to a substantial amount of money changing hands.} No final decision was rendered when Congress mandated that the Naval Petroleum Reserve No. 1 be sold within two years. Because Congress was aware of the pending dispute regarding the participation percentage, it required that the dispute be resolved within eight months.\footnote{958 F. Supp. at 1491} DOE did not comply with that time requirement and at the same time requested a new independent technical report. Because of the impasse and failure to comply with the statutory deadlines, Chevron filed an action seeking a preliminary injunction and a summary judgment requiring DOE to make a determination on its request for a revision of the participation percentages.\footnote{958 F. Supp. at 1489-90. The decision is also discussed in § 25.05 infra.} The unanimity requirement for revisions combined with the retroactive nature of the decisions creates substantial impediments to the resolution of disputes regarding the appropriate participation percentage. While the system did work well on two prior occasions, the inability to get unanimous support from the engineering committee...
triggered a lengthy process, which not even a legislative mandate could speed up given the complex nature of determining appropriate participation percentages.

[6] Effective Dates and Termination

Most unitization agreements have some express provision relating to when the agreement becomes effective. The API Model Form uses as an effective date the date that an agreed to percentage of working interest owners execute the agreement. In some cases, unanimous consent may be required of all working interest owners, but that leads to problems relating to last minute holdouts. Other unitization agreements require governmental approval in order to be effective. Thus, not only must a specified percentage of working and royalty interest owners ratify the agreement, but the state conservation agency must approve the agreement as provided by statute.47

Under the API Model Form, the unitization agreement self-destructs if the needed percentages for approval are not achieved by the designated date. It also allows the termination date to be extended even if the approval percentages have not been met but if some minimum approval percentage has been attained.

Most unitization agreements also provide for the termination of the unit if certain events occur. Usually the unit will not terminate so long as Unit Operations are being conducted, although many unitization agreements require some form of production in order to be extended indefinitely.48 The terms are thus similar to the typical secondary term of an oil and gas lease. They are potentially infinite in duration and are thus like fee simple determinable estates. In addition to either the cessation of production or unit operations, the termination provisions will usually allow a predetermined percentage of the working interest owners to voluntarily terminate the unit. The termination clause will also give each of the lessees a short time to keep their leases alive by meeting either the production requirements of the lease or a savings provision, if one is included. The API Model Form is typical by providing:

Term. The term of this agreement shall be for the time that Unitized Substances are produced in paying quantities or other Unit Operations are conducted without a cessation of more than ninety (90) consecutive days unless sooner terminated by Working Interest Owners in the manner herein provided.

Termination by Working Interest Owners. This agreement may be terminated by Working Interest Owners owning a combined Unit Participation of _____ percent (_____%) or more whenever such Working Interest Owners determined that Unit Operations are no longer profitable or feasible.

47 The unitization agreement in Belridge Oil Co. v. Commissioner, 27 T.C. 1044, 7 O.&G.R. 673 (1957), aff’d sub nom. Commissioner v. Belridge Oil Co., 267 F.2d 291, 10 O.&G.R. 662 (9th Cir. 1959), provided in part: “This agreement shall become effective... after all of the following events have occurred:... (c) Approval of this agreement by the Oil and Gas Supervisor of the State of California...”

Effect of Termination. Upon termination of this agreement, the further development and operation of the Unitized Formation as a unit shall be abandoned, and Unit Operations shall cease. Each oil and gas lease and other Agreement covering lands within the Unit Area shall remain in force for sixty (60) days after the date on which this agreement terminates, and for such further period as is provided by the lease or other agreement.49

In *Parkin v State Corporation Commission*,49a the Kansas Supreme Court interpreted the termination provisions of a unit agreement that had been incorporated into a compulsory unitization order. A 5800-acre compulsory unit had been established by Commission order. That order, which incorporated a voluntary unit agreement, stated that operations were to continue so long as there was production in paying quantities and unit operations were being conducted. The unit agreement further provided that the unit could be terminated solely upon the affirmative vote of 65% of the working interest owners, who would have to find that there was either no production in paying quantities or ongoing unit operations. Waterflood operations had been discontinued, and at the time of the second Commission hearing there were only six marginally producing wells still active on the unit. Several royalty and working interest owners filed an application with the Commission to terminate the unit. If this were solely a voluntary unit, the court admitted that it could be terminated only on the basis of what the parties had contracted for in the unit agreement. But in this case the use of the compulsory unitization power of the state changed the prior private agreement into one where the police power was implicated. The Commission could not delegate to 65% of the working interest owners the power to terminate the unit. The Commission must retain its own power to terminate based on the prevention of waste and the protection of correlative rights objectives of the compulsory unitization order. An analogous situation to Parkin arose in Louisiana. In *Eads Operating Co. v. Thompson*,49b a mineral lessee sought a declaratory judgment that a unit had terminated. He sued both the Commissioner of Conservation, who had approved the unit, and his co-owners.49c The unit was created with the execution of a unit agreement and a unit operating agreement in 1948. An order was later issued by the Commissioner recognizing the existence of the unit. The unit agreement provided in part:

> The unitization and unit operation… shall go into effect on… and this agreement shall continue in full force and effect as long as production is or can be produced in paying quantities in the Unit Area, or any part thereof, and until all unit operations have been abandoned and all materials have been salvaged from the premises.49d

The unit operating agreement contained a similar provision.

49 API Model Unit Agreement Article 18.
49c That part of the decision analyzing the problem of terminating units either approved of, or compelled, by state conservation agencies is discussed at §§ 15.02-15.03 supra.
49d 53750. 2d at 1194.
In 1979, the unit operator discontinued production from the field and plugged and abandoned the wells. The operator also canceled the leases. Several months later, Eads acquired leases on lands contiguous to the unit area in the formation that had previously been unitized. A well was drilled within the unit boundaries and was productive. A group of unitized royalty owners sought royalties under the unit agreement. Eads then filed an action with the Commissioner seeking a determination that the unit had either terminated or had been improperly approved.

In interpreting the termination provisions of the two agreements, the court found that there were two prerequisites that must be complied with in order to terminate. The first was an abandonment of all operations and salvage of equipment, and the second was whether production is or can be produced in paying quantities. There was no factual dispute about meeting the first requirement but there was a factual issue on second. After a two-year period, production from a well located in the unit area from a unitized reservoir, achieved production in paying quantities. Because there was a question of fact as to whether the unit terminated, the trial court’s issuance of a motion for summary judgment in favor of Eads was reversed and a remand for a trial was ordered.

On remand, the trial court again found that the unit agreement had terminated because the wells had been plugged, operations abandoned, and the equipment salvaged. On appeal, the court found that the private law issues relating to the interpretation of the unit agreement and unit operating agreement were largely irrelevant. The court focused instead on the validity of the Commissioner’s power to recognize the existence of the unit. The orders were issued under Act 157 of 1940, which limited the Commissioner’s pooling authority to drilling units. Thus, reservoir-wide statutory units were not encompassed within the grant of power given to the Commissioner. The private agreement between the royalty owners was expressly conformed to the rules and regulations of the Commissioner. Since the unit never came into existence, there was no issue as to its termination and the royalty owners upon whose tracts the wells were drilled were entitled to leasehold, not unitized, royalty.

In *Kansas Baptist Convention v. Mesa Operating Limited Partnership*, mineral owners who had executed a unit agreement sought its termination because the unit operator had allegedly breached an express provision of the agreement. The agreement provided that:

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49e 537 So. 2d at 1194-95.
49f See § 24.02 [2][c] infra for a discussion of the ultra vires issue.
49h 64 P.2d at 207.
Mesa became the unit operator and in response to a Kansas Corporation Commission order that permitted infill wells, proposed to drill such a well. The plaintiffs objected because their benefits were based on a fixed price for natural gas that was well below the market value; therefore, the costs of drilling the well would not be recovered from the increased production. The court initially concluded that the unit operator had breached an implied duty to the plaintiffs when it drilled the infill well, knowing that it would substantially devalue their interest. While noting that the agreement gave the unit operator near-total control over unit operations, the court nonetheless implied a duty to act in good faith in developing the premises. The court thus concluded that the unit operator had breached the unit agreement. However, the remedy was not to terminate the unit agreement. Equitable relief to avoid the unconscionable terms of the agreement would normally be appropriate, but since the parties expressly agreed as to what events would cause the unit to terminate, the court was not empowered to substitute its own judgment for that of the contract parties. The court was not willing to add additional provisions to the unit agreement that would allow it to be terminated.

In *Norman v. Apache Corp.*, the court interpreted provisions of a joint operating agreement which required the operator to notify the non-operators of the date that a well was being shut-in, the reason for the shut-in, and the date of the restoration of production. The agreement further gave the unit operator the unilateral right to abandon a well without prior notification to the non-operators. Apache, the operator, decided to abandon a unit well that was holding several leases of the non-operators in the secondary term. Apache did not notify the non-operators until after the time for keeping those leases alive had lapsed. This resulted in the termination of several leases. The court, applying Texas law, found that abandoning a well and shutting in a well are not the same. The well in this case was not shut-in, it was abandoned, and thus the terms of the JOA requiring notification were not triggered.

In *Hitzelberger v. Samedan Oil Corp.*, the standard unit agreement language regarding the term of the agreement was argued to “preempt” a lease clause which automatically terminated the lease upon a failure to make timely and accurate royalty payments. The lessee argued that as long as the unit was alive because of unitized production, royalty interests voluntarily committed to the unit could not be terminated unless the unit agreement terminated. The court rejected that argument, observing that the term provisions of the unit agreement relate to the duration of the unit agreement itself and not to the duration of an individual oil and gas lease that is committed to the unit.

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49 See § 19.04 infra for a more complete discussion of the relationship between the unit operator and non-operating working interest owners.

49 Norman v. Apache Corp. 19 F.3d 1017, 128 O.&G.R. 597 (5th Cir. 1994).


49m 948 S. W.2d at 508. While denoted Articles 17.1 and 17.2 in the unit agreement, the language conforms to the API Model Form Unit Agreement (1977.ed.) Articles 18.1 and 18.2 produced at § 29.01 infra.

49m This aspect of the case is discussed in §17.02[10] infra.
Thus, when the royalty payments were not made, the lease automatically terminated even though the unit agreement continued on, albeit without the now-terminated lease, which was transformed into an unleashed mineral estate.\footnote{49n 948 S.W. 2d at 508. The lease was still in its primary term when the royalty payments were not made but this did not prevent the lease from automatically terminating. The potential removal of the lease from the unit may raise joinder problems. See § 19.01 [2][a][ii] infra.}

[7] Surface Use Rights

A provision of the unit agreement will usually authorize the unit operator or working interest owners to utilize so much of the surface as is reasonably necessary to serve unit development.\footnote{49.1 API Model Unit Agreement § 11.1 at § 29.01 infra. The general issues relating to use of the surface estate for unit purposes are discussed at § 20.06 infra.} In Carrigan v. Exxon Co. USA,\footnote{49.2 877 F.2d at 1237, 111 O.&G.R. 571 (5th Cir 1989).} two important issues were resolved when a conflict arose between a leasehold surface use clause and the unit agreement’s surface use clause. Carrigan was a successor in interest in the surface having purchased that estate from the owner of the surface and the mineral estate. The mineral estate had been leased with a clause requiring the lessee to bury all pipelines below “ordinary plow depth.” The predecessor in interest, however, had executed a unit agreement which gave the Unit Operator the power to use so much of the surface as was necessary to unit operations, without giving any surface owner the right to require burial of pipelines. Carrigan first argued that the unit agreement did not control his interest since his predecessor had executed the agreement as a “royalty owner.” Carrigan was only a successor in interest to the surface and thus relied on the lease and not the unit agreement. But the unit agreement defined the term “royalty owner” broadly to include owners of “land.”\footnote{49.3 877 F.2d at 1241. The definition in the API Model Unit Agreement is much more narrow and probably would have created more problems for the court. See § 29.01 infra.} The court, therefore, concluded that the prior owner had signed the unit agreement in his capacity as both a royalty and surface owner.

The second issue related to the conflict between the broad surface use and right of way clause in the unit agreement and the pipeline burial clause in the agreement and the pipeline burial clause in the lease. The unit agreement contained the standard preemption clause so that the agreement “shall amend and modify all existing leases… to the extent that the provisions of such existing leases… are in conflict with the provisions of this agreement.”\footnote{49.4 877 F.2d at 1242. If the pipeline burial clause was applicable, it was a covenant which ran with the surface owner and could be enforced under Texas law by a successor in interest to the surface. See, e.g., Manges v. Gulf Oil Corp., 394 F.2d 487, 488, 29 O.&G.R. 106 (5th Cir. 1968); Mobil Oil Corp. v. Brennan, 385 F.2d 951, 27 O.&G.R. 656 (5th Cir. 1967).} The court could have found no conflict since the unit agreement did not specifically mention burial of pipelines. However, the court read the broad grant of surface use rights, including rights-of-way, to be in conflict with the pipeline burial clause. Given the express preemption clause, the court found the unit agreement abrogates the surface owner’s leasehold right to require burial of pipelines.
[8] Subsequent Ratification and Risk Penalties

When voluntary units are formed and less than 100% of the mineral interests are joined, the standard API Model Unit Operating Agreement does not have express provisions for subsequent ratification and joinder by leased or unleased interests. This omission can create certain problems that were evidenced in the Matter of SAM Oil, Inc.\textsuperscript{49.5} At the time that the unit operating agreement was initially executed, an unleased owner refused to join. Some 30 years later she leased her interest to SAM Oil, who sought to ratify and join the unit at a time that the unit was drilling a new well near the leased acreage. The unit operating agreement was silent on the issue of how to deal with subsequent ratifiers, but it did have a provision imposing a risk penalty of 300% for those working interest owners choosing not to participate in the drilling costs for unit wells.\textsuperscript{49.6}

When the unit operating agreement is silent as to subsequent ratification, the Utah Supreme Court concludes that unleased or working interest owners have the power to ratify or accept what is in effect a continuing offer to join. This continuing offer is not open indefinitely and may be terminated due to changed circumstances.\textsuperscript{49.7} All ratifications or acceptances, however, must be unconditional and accept the terms of the instrument being ratified. Here, SAM Oil accepted the risk penalty provision for nonparticipants when it ratified the agreement. Citing this Treatise, The Court gave the following reasons for applying the risk penalty provisions to SAM Oil:

\begin{quote}
SAM Oil should not be able to acquire the benefits of partial ownership without first compensating the existing working interest owners for the risk they took in drilling the well. If the well had been unsuccessful, a subsequently joining party would not have had to absorb any of the costs of drilling.\textsuperscript{49.8}
\end{quote}

The complexity of a large-scale unitization is reflected in a series of cases involving the Madden Deep Unit, a 70,000-acre unit containing federal, state and private lands. In Moncrief v. Louisiana Land & Exploration Co.,\textsuperscript{49.9} several important issues relating to unit operating agreements were analyzed.

The Madden Deep Unit Agreement was executed in 1967, covering some 70,000 acres of land. In 1969, all of the parties to the unit agreement executed a revised unit operating agreement (RUOA). In 1975, some, but not all, of the parties executed a supplemental unit operating agreement (SUOA) that covered operations at depths greater than 5,500 feet below the base of the Waltman Shale. The parties to the RUOA who did not sign the SUOA were still being governed by the provisions of the RUOA as to the deeper formations.

\textsuperscript{49.5} In the Matter of SAM Oil, Inc., 817 P.2d 299, 116 O.&G.R. 401 (Utah 1991).
\textsuperscript{49.6} 817 P.2d at 303. The original unit operating agreement only imposed a 150% risk penalty, but the agreement was modified on April 27, 1983, approximately six months prior to SAM Oil’s ratification.
\textsuperscript{49.7} 817 P.2d at 299 (citing Simon, Problems of the Tract in Which All or a Portion of the Interested Parties DO NOT Agree on Unit Operation, 3 SW. Legal Fdn. Oil and Gas Inst. 161, 167, (1952).
\textsuperscript{49.8} 817 P.2d at 304, citing this Treatise at § 12.01.
\textsuperscript{49.9} 861 P.2d 516 (Wyo. 1993).
In 1990, Moncrief executed a farmout agreement with Amoco that covered a 160-acre tract within the unit. Moncrief agreed to commence drilling a well within approximately six months of the execution of the agreement. If the well was drilled and was capable of producing in paying quantities, Amoco promised to convey all of its working interest to Moncrief, reserving an overriding royalty of 12.5% of 8/8ths. Amoco was not a signatory party to the SUOA.

Under the unit operating agreement, Moncrief proposed to other working interest owners in the 640-acre section upon which the 160 was located to participate as the drilling block for the exploratory well. Several working interest owners agreed to participate. The well was commenced shortly thereafter.

Under the SUOA, the determination of whether there is a majority, who consent or do not consent to the drilling of an exploratory well governs the amount of risk penalty imposed. If the consenting parties constitute a minority in interest, the non-consenting parties must pay risk penalty. If the consenting parties constitute a majority, the non-consenting parties must assign to the consenting parties their interests in a four-section area as to depths above 19,000 feet and a nine-section area as to depths below 19,000 feet. Moncrief argued that since it and Yates, who had joined in the farmout, had consented to participate, the consenting parties constituted a majority of interests. The trial court had found that the farmout acreage could not be committed because Amoco was still the owner of the acreage and had not signed the SUOA.

In the initial opinion written by Justice Urbigkit, which subsequently was withdrawn, the court applied the equitable conversion doctrine to the farmout agreement. Essentially, the withdrawn majority opinion treated the farmer as the equitable owner of the working interest that would eventually be conveyed should the farmer comply with the requirements of the farmout agreement. Once Moncrief had commenced drilling, the farmout agreement became a bilateral executed contract, not merely an option, under this rationale.

After granting the motion for rehearing, a unanimous Supreme Court held that, to determine whether a consenting party was a minority or majority party for purposes of selecting a risk-penalty provision, the critical point in time must be prior to the commencement of the exploratory well. Under the provisions of the SUOA, the election procedures for going consent or non-consent have to be exercised prior to the actual drilling of the well. If the determination of majority versus minority status were at some later point in time, it would defeat the purpose of the election procedures set forth in the SUOA. As Moncrief did not have ownership or control at the time the well was spudded, because the assignment had not be executed, he had to rely on the equitable conversion theory would apply to a farmout, because at the critical time when the election had to be made, Moncrief did not even have an option to drill a well, much less an equitable ownership of it. On the critical

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49.10 861 P.2d 500 (Wyo. 1993).
49.11 1993 WL 77287 (Wyo. 1993).
date, Amoco was the owner of the interest subject to the consent/non-consent election and, by virtue of the SUOA's election provision, Amoco's failure to make an election was the equivalent of an election not to participate. Thus, the court concluded that it was a minority who had consented to the drilling and applied the appropriate risk-penalty provisions.

In Willard Pease Oil & Gas Co. v. Pioneer Oil and Gas Co., the problems of implied ratification and risk penalties were the focal point of litigation between the Unit Operator and some non-operators. In 1971, Utah leased certain lands to Anschutz, which were later included in the Willow Creek East Unit. Anschutz became the Unit Operator. Both the Unit Agreement (UA) and the Unit Operating Agreement (UOA) contained provisions relating to the consequences of unit participants transferring ownership of interests covered by the agreements.

Anschutz was required by the UA to drill a test well. It entered into a Farmout and Acreage Contribution Option Agreement with Pease and Quigley. A well was drilled and completed and Anschutz assigned 75% of the working interest in the state lease to a depth of 4,493 feet. The well was shut in and then abandoned. A successor Unit Operator drilled a second well to a depth below that owned by Pease and Quigley. Apparently no notice was ever sent them regarding the drilling of the well. No production was obtained from the deeper formation but the Operator moved up the wellbore and completed a well in a formation in which Pease and Quigley owned an interest. Several years later production was obtained. Pease and Quigley then offered to pay their proportionate share of the costs of drilling in return for getting their proportionate share of production. The Unit Operator declined the offer and asserted that their non-participation in the up-front costs of drilling caused the UOA's 300% risk penalty to be applicable. Production commenced in 1990 and a formal ratification of the UA and UOA by Pease and Quigley took place in October 1991.

The trial court, on joint motions for summary judgment found that neither the farmout agreement nor the assignment to Pease and Quigley constituted a ratification of the UA or UOA, so that at the time the well was drilled in 1981, they were not parties to the UOA. The court nonetheless applied the 300% risk of excess gas by a Party or other than that Party's gas purchaser shall be only for such reasonable periods of time as are consistent with the minimum needs of the industry under the circumstances, but not to exceed one year. Any such sale shall always be subject to the right of the owner of such excess gas to exercise at any time its right to take in kind, or separately dispose of, its share of such excess gas.

49.12 Willard Pease Oil & Gas Co. v. Pioneer Oil and Gas Co., 899 P.2d 766 (Utah 1995).
49.13 The key provisions were slightly different than the 1977 API Model Forms. The Unit Agreement provided:

[A]ny grant, transfer, or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee, or other successor in interest, No assignment or transfer of any working interest, royalty, or other interest subject hereto shall be binding upon Unit Operator until the first day of the calendar month after unit Operator is furnished with the original, photostatic, or certified copy of the instrument or transfer. The Unit Operating Agreement provided: No transfer of any Committed Working Interests shall be effective unless the same is made expressly subject to the Unit Agreement and this agreement and the transferee agrees in writing to assume and perform all obligations of the transferor under the Unit Agreement and this agreement insofar as it relates to the interest assigned.

49.14 The Unit Operator was unable to produce substantial documentation regarding the actual costs of drilling the well. The trial court nonetheless found.
excess gas not previously delivered to a gas purchaser. A Party (hereinafter called “Selling Party”) who pursuant to this Section 5.11, shall dispose of another Party’s excess gas, shall dispose of such gas in accordance with the terms of the Selling Party’s gas sales contract and the Party whose excess gas is being sold agrees to accept and be bound by all terms and conditions of such contract. Further, the Party whose excess gas is being sold agrees to indemnify, defend and hold harmless the Selling Party from all claims, demands, suits or causes of action that might arise by reason of such sale of such excess gas.

Although this was a specially drafted provision, the court found that the first sentence was ambiguous and admitted extrinsic evidence to ascertain the intent of the parties.

Amoco and other working-interest owners had not entered into gas sales contracts during a period in which Anschutz was selling gas. Anschutz eventually settled a take-or-pay dispute with the gas purchaser and Amoco sought a sharer of the settlement monies. Amoco argued that, before the gas balancing provisions of Section 5.11 could be triggered, each working-interest owner would have had to execute a gas purchase or sales contract. Amoco argued that if any working interest owner has gas available for sale, but no purchase, the owner could invoke the excess gas provisions. The appeals court found both interpretations plausible and therefore ambiguous. The trial court, after hearing extensive parol evidence regarding the provision, had found the Amoco interpretation more consistent with the intent of the parties.

The court also interpreted the provision relating to the one-year time limit contained in the fourth sentence. That language comes directly out of the API Model Form Unit Agreement and was called “boilerplate” by the court. Anschutz argued that the time limits restricted the period in which market sharing of “excess gas” sales would occur. The court found that the language was ambiguous and again admitted extrinsic evidence. According to the court, the language meant that the selling party had only a limited right to sell the gas of a non-selling party to avoid potential tax liability.

Section 15.11 effectively gave Amoco and the other working-interest owners a share of Anschutz’s favorable gas sales contract and a share of the settlement proceeds from the take-or-pay dispute. Whether parties to a unit operating agreement intend for each of them to share in the benefits of individually negotiated sales contracts is an issue that working-interest owners will have to face in the negotiation process.

Parties attempting to deal with problems of the natural gas market, including gas imbalances, need to pay more attention to the many variables that will affect each working-interest owner’s right to sell all or part of the gas stream. Section 5.11 of the Anschutz

49.15 7 F.3d at 913-14.
49.16 Id. at 918-19. The trial court was most influenced by the evidence given by the working-interest owners with smaller stakes, as they would be very concerned about the prospect of gas sales imbalances.
49.17 Id. at 919. Giving unlimited control to the selling party might cause the unit to be treated as a corporation for tax purposes, which would increase the overall taxation on unit operations.

It is interesting to note that the court and the parties agreed that a phrase in the fourth sentence of Section 5.11, which is standard language in the API Model Form and which read “only for such reasonable periods of time as are consistent with the minimum needs of the industry under the circumstances,” was “devoid of discernible meaning.” Id.
Ranch East Unit Operating Agreement created several ambiguities that led to litigation. Several model gas balancing agreement forms have been developed or are in the process of being developed. Resorting to these forms for individual drafting efforts will avoid the problems faced by the parties in Anschutz.

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49.197 F.3d at 913-14.
49.20Id. at 918-19. The trial court was most influenced by the evidence given by the work-interest owners with smaller stakes, as they would be very concerned about the prospect of gas sales imbalances.
49.21Id. at 919. Giving unlimited control to the selling party might cause the unit to be treated as a corporation for tax purposes, which would increase the overall taxation on unit operations.

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to share in the benefits of individually negotiated sales contracts is an issue that working-interest owners will have to face in the negotiation process.

Parties attempting to deal with problems of the natural gas market, including gas imbalances, need to pay more attention to the many variables that will affect each working-interest owner’s right to sell all or part of the gas stream. Section 5.11 of the Anschutz Ranch East Unit Operating Agreement created several ambiguities that led to litigation. Several model gas balancing agreement forms have been developed or are in the process of being developed. Resort to these forms or individual drafting efforts will avoid the problems faced by the parties in Anschutz.

Because most unit agreements require the working interest owners to take the oil in kind, various unit operators sought to avoid liability to the United States for overcharges related to oil pricing under the Federal Energy Administration’s 1974 policy on stripper well production. The courts, however, have applied the “operator liability doctrine” to deny that defense, providing the United States with a single defendant instead of a multitude of defendants. This doctrine states that the operator is liable for overcharges made by the non-operating owners even if the non-operators are taking their share in kind. This doctrine is based in part on the burden it would place on the government to seek reimbursement from all of the parties, including royalty owners, who had benefited from the improper pricing. The operator liability doctrine, however, has been limited to situations in which it would truly be inconvenient or difficult for the United States to collect the overcharges from all of the parties selling crude oil. Thus, where there were only 3 working interest owners, each taking in kind, the United States could not recover 100% of the overcharges from the unit operator. In addition, if some of the non-operating working interest owners had entered into a global settlement of DOE claims without specifying what leases were included, the operator could present evidence that a 100% recovery against it would provide the United States with a double recovery insofar as the global settlements would have resolved the overcharge liabilities of the non-operators.

In Moncrief v. Williston Basin Interstate Pipeline Co., a gas purchase contract called for the sale of a minimum quantity of 12,000 MCF/day from a unit. That figure was set at the unit’s processing and separating capacity. Another provision of the contract said

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49.22b Exxon Corp. v. Jarvis Christian College, Note 49.11 supra. This case is also discussed in § 17.02 [4] supra. The court did note that Exxon, as a matter of federal common law, could sue for reimbursement from the other owners although it did not allow them to recover against the royalty owners because Exxon had not acted as a reasonable and prudent operator would have in setting the prices. See also Anadarko Petroleum Corp. v. Baca, 117 NM 167, 870 P.2d 129, 128 O.&G.R. 311 (1994), where the operators who make payments to the state might have a more difficult time seeking refunds because of state procedural or substantive rules relating to tax refunds.

49.22c In re Department of Energy Stripper Well Exemption Litigation, 90 F.3d 1551 (Fed. Cir. 1997) (UPRC).

that if the “Seller and partners” developed more than a 12,000 MCF/day capacity from lands dedicated to the contract, the purchaser would not be obligated to take for such excess volumes. \(^{49.22}\) The contract issue resolved by the court was whether the purchaser had to take the full 12,000 MCF/day or only the seller’s proportionate share of unit production when the other working interest owners were not taking their share of the gas. The court found that there were justifiable issues of fact regarding the contract language that might require the purchaser to take more than the individual seller’s proportionate share of unit production.

[10] Royalty Obligations

Under most standard unit agreements, each working interest owner committed to the unit is required royalty payments. \(^{49.23}\) Where the working interest owner who is otherwise obligated to make those payments fails to do so, or does not provide the unitized royalty owner with the necessary paperwork, including division or transfer of owners, can the royalty owner sue the purchaser of the hydrocarbons under the Oklahoma Production Payment Act? \(^{49.24}\) In *Quinlan v. Koch Oil Co.*, \(^{49.25}\) Koch was the purchaser of oil from a lease where the Quinlans owned a mineral interest by virtue of a quitclaim deed. Koch actually paid the Quinlans between 1965 and 1971. The mineral interest was unitized in December 1971 in order to engage in a waterflood operation. In February 1972 Koch mailed to the operator of the Quinlan interest a notice of the unitization and amended division orders reflecting the changed percentages of ownership due to the unitization. Koch did not attempt to personally notify Quinlan. Quinlan never returned a division order and it placed Quinlan’s proceeds in suspense. In 1976 Koch again mailed new division orders to Quinlan’s lessee. Again Quinlan did not respond. Eventually Quinlan was made aware of the proceeds in the suspense account and payment was made, including 6% simple interest. Quinlan argued that under that statute he was entitled to a 12% interest rate compounded annually and that Koch owed him a fiduciary duty which had been breached by its failure to notify him of the existence of the suspended funds. The district court found for the Quinlans on both the interest rate and the breach of a fiduciary duty.

If the Quinlans could show that they had marketable title at the time of unitization they would be entitled to the 12% interest mandated by statute. The pre-unitization transfer order, however, could not serve as evidence of marketable title after the unitization. \(^{49.26}\) But, there was other evidence in Koch’s possession, which showed that the Quinlans had marketable title. The mere failure to execute a division order upon unitization cannot defeat marketable title. At the time of unitization the Quinlans were legally entitled to the proceeds

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\(^{49.21}\) 880 F. Supp. At 1521.

\(^{49.22}\) See, e.g., Article 6.5 of the API Model Form Unit Agreement (1977 edit.) reprinted in § 29.01 infra.


\(^{49.24}\) In *Hilliard v. Amoco Production Co.*, 688 so. 2d 1176 (La. App. 1996), the court found that an operator who failed to comply with the terms of the Louisiana Royalty Payment Act was liable for double royalties, interest, and attorney’s fees, even though there was some substantial problems relating to the titles and boundaries of the unit.

\(^{49.25}\) 25 F.2d 939 (10th Cir. 1994). The parties sought a rehearing en banc, which led the panel to file an amended opinion. The en banc court chose not to review the amended decision. Id. At 937-38.

\(^{49.26}\) Id. At 940, citing Young v. West Edmond Hunton Lime Unit, 275 P.2d 304, 309, 3 O.&G.R. 1736 (Okla. 1954).
from the purchase of the oil and the failure of the working interest owner to live up to its contractual bargain to make payments could not excuse Koch from its obligations. Finally, the court found that the relationship between Koch and the Quinlans could support a fiduciary relationship based on trust and confidence insofar as Koch’s failure to notify the Quinlans was concerned. Since the district court had found a fiduciary relationship as a matter of law, that issue had to be remanded in order for it to be determined as a factual matter given the relationship between the parties that antedated and post-dated the unitization of the mineral interests owned by the Quinlans.

Although it was unclear from the facts whether a pooled unit or a fieldwide unit was involved, the unit operator may owe an obligation to Indian royalty owners to see that royalty payments are properly made. In Coosewoon v. Meridian Oil Co., the court noted that the Unit Operator was required to act on the non-operating lessee’s behalf in seeing that the lessors were properly paid their royalty interest after the lease had been communitized. While the court otherwise denied the royalty owner’s causes of action, including a request to terminate the lease, the obligation to make such payments by the Unit Operator was unchallenged.

The impact of the unit agreement’s provision that conforms all lease provision to the agreement, and the royalty clause of a lease that has been voluntarily unitized is explored in depth in Hitzelberger v. Samedan Oil Corp. The lease contained a royalty clause which made timely and accurate payments a limitation, so that the lease would automatically terminate if the payments were not appropriately paid. The lease was unitized and off-lease production achieved. The lessee did not make a royalty payment pursuant to the lease on the basis of the unitized production. The lessee argued that various terms of the unit agreement, including the lease conformance provision, the allocation of production provision, the royalty payment provision and the term of the unit provision all modified the leasehold royalty clause and prevented the lease from terminating. The court correctly noted the interplay between the lease and the unit agreement. While the lease is conformed to the unit agreement, those provisions merely relate to the operations and the fact that operations, including production, that occur off of the leasehold premises are constructively attributable to the lease. But the lease’s royalty payment provisions are otherwise not affected because other unit agreement provisions specifically give the responsibility for paying royalty on the tract’s allocable shares to the individual working interest owners. Thus when off-lease unit production is achieved, the leasehold provision requiring payment within a specified period of time, or have the lease automatically terminate, is triggered. The unit agreement operates to keep the lease alive through off-lease activities and calculates the amount of production that is attributable to the leased premises. As the court observed:

…production allocated from any tract in the unit will constitute production from the

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49.27a See Article 3.3 of the API Model Form Unit Agreement (1977 ed) reprinted in § 29.01 infra.
49.27c See P. Martine & B. Kramer, Williams and Meyers Oil and Gas Law §§ 604.7, 644.12, 656.3
49.27d 948 SW 2d at 508-09. The unit agreement appears to follow the API Model Form in many respects.
leased premises” on the other tracts in the unit and invoke the royalty provisions in the individual oil and gas leases. The unit agreement amends individual oil and gas leases to the extent necessary to conduct uniform operations, but leaves in effect the individual lease’s royalty provisions.49.27e

The result is that the lease automatically terminated under its express terms when the working interest owner did not make a timely royalty payment based on unit production.49.27f


Increasingly both unit operators and working interest owners who are participating in unit or joint operating agreements are being sued when unit operations cause environmental damage. This can arise in the context of a regulatory duty such as the plugging of wells.49.28 It can also apply in the context of a unit operation where a working interest owner is sued for damages and/or injunctive relief based on the creation and maintenance of a common-law nuisance. In Branch v. Mobil Oil Corp.,49.29 a property owner sued the unit operator, Mobil, and various working interest owners in the Healdton One Unit for damages caused by the alleged creation of a nuisance. ARCO, a working interest owner, moved for a summary judgment dismissing the claims against it because it did not have operational control of the unit.

In exploring the potential liability of working interest owners for actions taken by the unit operator, the court found that the unit operator is merely the agent for the working interest owners who form the unit.49.30 The court specifically noted that all working interest owners sent representatives to the Operating Committee, which exercised supervisory control over unit operations. In addition, Mobil could not act alone in unit matters since the voting mechanism required a vote of at least three working interest owners controlling at least seventy-five percent of the unit. Since Mobil only owned sixty percent, ARCO with its eleven-percent interest was not merely a passive party to unit operations. ARCO had not established, as a matter of law, that it was not legally responsible for the pollution arising from unit operations.49.31 ARCO also asserted that its potential liability could only be several and not joint or collective since the liability would fall under the definition of a “unit expense” which is a several liability.49.32 Without determining whether environmental or pollution damages would be considered a unit expense, although noting that term’s expansive definition, the court found that even if ARCO’s liability was several, it still could be sued for its share of the damages suffered by the property owners as a result of the nuisance conditions created by unit operations.49.33

49.27e 948 SW 2d at 509
49.27f Hitzelberger is also discussed in § 17.02 [6] supra and § 19.01 [2][a] infra.
49.28 See §3.01 supra for a discussion of the scope and extent of state well plugging regulations which typically allow the state to recover the costs of well plugging from parties other than the most current operator of the well.
49.30 See § 19.04 infra for a more complete discussion of the relationship between operators and non-operators.
49.31 788 F. Supp. at 533-34.
49.33 788 F. Supp. at 534.
Similar problems relating to the joint or several liabilities of parties to a joint operating agreement were raised in Texaco, Inc. v. Berry Petroleum Corp.\textsuperscript{49.34} Berry Petroleum was the operator under a joint operating agreement. It drilled a well, went bankrupt and failed to plug the well after the well was deemed non-productive. Texaco, a working interest owner, responded to concerns about surface pollution and well plugging obligations by plugging the well without getting approval from the other working interest owners. Texaco then sought contributions from the other owners for its well plugging and surface remediation costs.\textsuperscript{49.35}

As to one of the formations covered by the JOA, Meridian and El Paso were carried parties as they had gone non-consent.\textsuperscript{49.36} As such they only had a future interest until the well attained payout and the contractually agreed-to-risk penalty. In this case, however, due to an amendment of the JOA, El Paso’s interest in one formation were taken over by Berry when the well was completed, extinguishing the future interest retained when the parties went non-consent. If the targeted formation was the sole source of the pollution, the court would have dismissed the actions against the carried parties since they owned no interest whatsoever after the drilling of the well. But they did retain interests in other formations and there were disputed issues of fact regarding what formations were causing the alleged nuisance.\textsuperscript{49.37}

The court dealt similarly with the regulatory duty to plug claims asserted by Texaco.\textsuperscript{49.38} It is important to note, however, that Texaco could not rely on the regulatory provision imposing joint and several liability on owners and operators of wells for well plugging costs. While that provision gives the state and any injured party the right to seek joint and several liability. Texaco as a working interest owner was bound by the terms of the JOA it executed with the other working interest owners. If that limited liability to a proportional amount of the costs, Texaco would not be able to impose joint and several liability on its contracting parties.\textsuperscript{49.39}

The issue of the scope and extent of the liability of the working interest owners in a unit was discussed in depth in Union Texas Petroleum Corp. v. Jackson.\textsuperscript{49.40} Both pre-unit and unit operations polluted a municipal drinking water supply. Mobil argued that Branch stood for the proposition that Mobil as unit operator was acting as an agent for the non-operators and therefore these principals would be jointly and severally liable for the pollution damages. In a civil action for contribution filed in district court, Branch would allow for joint and several liability unless the other working interest owners could show that the


\textsuperscript{49.35} 869 F. Supp. at 1527. It was admitted that Texaco’s actions probably minimized environmental damages and coopted the Commission from issuing a well plugging order. Id.

\textsuperscript{49.36} The court relied on Railroad Comm’n. v. Olin Corp., 690 S.W.2d 628, 88 O.&G.R. 1579 (Tex. App.), writ ref’d n.r.e., 701 S.W.2d 641 (Tex.1985) and H. Williams and C. Meyers, Oil and Gas Law, Manual of Terms 778 (Matthew Bender 1991) to define the nature of the interest owned by a working interest owner who goes non-consent under a JOA.

\textsuperscript{49.37} 869 F. Supp. at 1530.

\textsuperscript{49.38} See § 3.01 supra for a discussion of the court’s treatment of the regulatory claims.

\textsuperscript{49.39} 869 F. Supp. at 1531.

\textsuperscript{49.40} Union Texas Petroleum Corp. v. Jackson, 909 P.2d 131 (Okla. Ct. App. 1995), cert. denied. Union Texas is also discussed in § 3.01 supra and §§ 24.02[1]; 24.02[2][a], [c], [e] and 24.07[4][e] infra.
operator was acting outside the scope of its authority under the unit agreement.\textsuperscript{49.41} Whatever contribution would be determined in that civil action, however, would not affect the Commission's determination of liability for violating Commission pollution regulations. The Commission lacked jurisdiction to resolve contractual disputes between parties to a unit agreement. Thus, the Commission's limiting the liability of some of the working interest owners in some circumstances would not be overturned in an action seeking judicial review of the Commission's order.

\footnote{\textsuperscript{49.41} 909 P.2d at 146-47. Mobil was alleged to have caused the pollution by injecting too high a volume of saltwater at too high a pressure in order to effectuate the secondary recovery plan. There was no evidence of any unit decision regarding either the volume or pressure at which the injection was to take place.}

\footnote{\textsuperscript{49.42} The 1977 Form is reproduced in § 29.01 infra. The 1993 Model Form does not make any changes with regard to the ability to go non-consent.}

\footnote{\textsuperscript{49.43} See e.g., Form 3 Rocky Mountain Oil and Gas Ass'n, Art.9 (1959), reproduced in Martin & Kramer, Williams & Meyers Oil and Gas Law § 920.5 (Matthew Bender); A.A.P.L. Form 610-1989. \textit{Nearburg v. Yates Petroleum Corp.}, 123 NM 526, 943 P.2d 560 (NM App.), cert. denied, 123 NM 446, 942 P.2d 189 (NM 1997).}

\footnote{\textsuperscript{49.44} See also \textit{Hill v. Heritage Resources}, 964 5.W.2d 89 (Tex.App.-El Paso1997) (Because AFE attempted to cover drilling to a depth not authorized by JOA, alleged election to go non-consent was ineffective since AFE could not unilaterally change the terms of the JOA).}

\footnote{\textsuperscript{49.45} The court also characterized the non-consent or risk penalty as not a classic contractual penalty, or a liquidated damages provision since the monetary “penalty” is not imposed upon the breach of the JOA but is instead a mechanism to reimburse the consenting working interest owners for the risks they are bearing in the drilling of the well. The court stated: “We agree with Nearburg's characterization that ‘the non-consent penalty is the agreed-upon reward to [a consenting party] for taking the risk and the agreed-upon delay or limitation of profits incurred by [a non-consenting party] for avoiding it.’” 943 P.2d at 567. See generally Guy Wall, \textit{Joint Oil and Gas Operations In Louisiana}, 53 La. L. Rev. 79 (1992); Gary Conine, \textit{Rights and Liabilities of Carried Interest and Non-consent Parties in Oil and Gas Operations}, 37 Inst. On Oil & Gas L. & Tax’n 3-1 (1986).}

\textbf{[12] Elections to Participate, in Drilling Operations}

While the standard API Model Form, for Unit Agreements\textsuperscript{49.42} does not provide for the participants in the unit agreement to elect to go non-consent, other model form unit agreements, and the widely used AAPL Joint Operating Agreement forms have such provisions.\textsuperscript{49.43} The issue of how the election process operates was the heart of the issues analyzed in \textit{Nearburg v. Yates Petroleum Corp.}\textsuperscript{49.44} Nearburg and Yates had signed a joint operating agreement giving either party the right to propose a drilling project. The non-proposing party was then given 30 days to respond in writing to the proposal. Silence is expressly treated as a decision to go non-consent. Parties who elect to go non-consent are subject to a risk or non-consent penalty of from 200% for surface equipment to up to 500% of drilling costs. Nearburg proposed a new well and Yates did not respond within the 30-day period. Instead, Yates filed its own application to drill at the same site and sent a, letter informing Nearburg that Yates was proposing to drill that same well. Yates argued that theNearburg letter informing it of Nearburg’s proposal to drill was merely an offer that continued open until such time as Nearburg actually drilled the well. This argument was based in part on the fact that the JOA does not formally require a working interest owner to actually drill a proposed well. Nonetheless, the court reviewed the express language of the election provisions relating to new wells and determined that Yates had a thirty-day period in which to respond if it wanted to participate in the drilling project. Any other interpretation would render nugatory the entire elaborate electoral scheme, including the provision for non-consent or risk penalties.\textsuperscript{49.45} Thus when Yates allowed the 30-day period to lapse without sending a written reply, the express terms of the JOA are applicable which treat the lack of reply as a decision to go non-consent.
§ 17.03 Statutory Approval

In addition to the power to compel unitization, many states have statutory provisions authorizing the state conservation agency to approve voluntary unitization agreements. The perceived need for state approval may have been created by the problems raised by the federal and state antitrust laws. Several state statutes specifically provide that state antitrust laws will not be violated by actions taken by parties to a voluntary unitization agreement should they receive state approval. In many states, the procedures for approval of voluntary unitization agreements are not as structured as for compulsory unitization orders, with the exception of Texas, which has no compulsory unitization statute. Almost all of the states require notice and public hearing before approval will be granted. Careful attention must be paid to state conservation agency rules in these matters since the statutory mandates will be somewhat limited.

[1] Texas

Since Texas does not have a compulsory unitization statute, its voluntary unitization provision has engendered a substantial amount of use and scholarly attention. It also has the most structured procedures for agency approval of voluntary unitization orders. But the first problem that arises with the Texas statute is the conundrum created by two conflicting provisions. Section 101.013 provides in part:

49.46 For particular provision relating to approval for voluntary unitization agreements, see:
Alabama: Ala. Code. § 9-1 1-13(e), at § 30.01 A infra.
Alaska: Alaska Stat. § 31.05.110(l), at § 30.02A infra.
Georgia: Ga. Code. § 12-4-45(b), at § 30.10A infra.
Utah: Utah Code Ann. § 40-6-7, at § 30.44A infra.

50 The antitrust effects on unitization agreements are discussed in ch. 26 infra.
52 See § 18.02 infra for a discussion of the procedures that need to be followed for a compulsory unitization order.
53 See J. Weaver, Utilization of Oil and Gas Fields in Texas: A Study of Legislative, Administrative, and Judicial Policies 173-200 (1986). Professor Weaver’s study should be required reading for anyone interested in unitization and the role of state conservation agencies. She studies in depth the political, economic, and legal background to the enactment of the Texas voluntary unitization statute that was enacted over substantial opposition in 1949.
Agreements for pooled units and cooperative facilities are not legal or effective until the commission finds, after application, notice and hearing:

(1-6) [Mandatory substantive findings] 54

From a reading of this section the reader might conclude that in the absence of Railroad Commission approval there could be no valid voluntary unitization agreement. However, an earlier section of the act provides in part:

None of the provisions in this chapter restrict any of the rights that a person now may have to make and enter into unitization and pooling agreements. 55

Immediately after the passage of the act in 1949, the Railroad Commission took the position that the act only applied to those unitization agreements in which the parties sought Railroad Commission approval. Unitization agreements would otherwise be valid, even if no Railroad Commission permission was sought or received. 56

In addition to this inconsistency, the act only applied to voluntary agreements that were “necessary to effect secondary recovery operations for oil and gas.” 57 Again as a policy matter, the Railroad Commission could have narrowly or broadly interpreted the secondary recovery operation requirement. It adopted a policy to construe liberally “secondary recovery operations,” so if an injection well was being utilized somewhere on the unit, it would qualify for Railroad Commission approval. 58

The statutory findings that the Railroad Commission must make are relatively straightforward. They must find that the unitization agreement achieves either, of the twin goals set out in the act: encouraging secondary recovery operations or conserving gas. 59

Secondly, the Railroad Commission must determine that the agreement is in the public interest because it will prevent waste or conserve oil and gas or both. The third finding is that the unitization agreement must protect the rights of the signers and non-signers of the agreement.

The remaining findings are more specific in nature. The fourth requires the Railroad Commission to determine that the additional costs of conducting the unit operations will not exceed the value of the estimated additional production, which will be achieved by the unit operations. Additionally, the Railroad Commission must find that the present operations in the reservoir are incapable of achieving or inadequate to achieve the benefits of unitized

56 J. Weaver, Unitization of Oil & Gas Fields in Texas: A Study of Legislative, Administrative, and Judicial Policies 174-175 (1986).
58 J. Weaver, Unitization of Oil & Gas Fields in Texas: A Study of Legislative, Administrative, and Judicial Policies-172-176 “(1986). Professor Weaver cites an example of a unit operator who essentially drilled an unnecessary injection well in order to receive Railroad Commission approval of a unitization agreement that had already obtained the consent of over 99% of both the working and royalty-interest owners. Id. at, 175-177.
production. Finally, the Railroad Commission must find that the area included in the unit agreement has been reasonable defined by development and that each owner within that area has been offered an opportunity to join the unitization agreement “on the same yardstick” basis as other owners within the unit area.\(^60\)

There is no mention of a minimum level of consent that must be attained before the Railroad Commission will approve a voluntary unitization plan. The Railroad Commission has developed an informal policy, however, that applications must show consent from at least 85% of the working-interest owners and 65% of the royalty owners in order to receive favorable treatment. The non-signers’ interest cannot be affect by the Railroad Commission’s approval since they lack compulsory unitization authority.\(^61\)

Railroad Commission approval of unitization agreements has rarely been challenged. Nonetheless, dissident or holdout working- or royalty-interest owners can delay the beginning of unitization agreements by seeking judicial review of Railroad Commission order approving those agreements. In \textit{Staples v. Railroad Commission},\(^62\) the plaintiffs challenged the Railroad Commission’s order approving a voluntary unitization agreement covering the Spraberry Driver Unit. They argued that there was insufficient evidence to support the Railroad Commission’s mandatory findings relating to an opportunity to join on a yardstick basis, and the lack of injury to their interests whether they joined or remained outside of the unit. The trial court had granted the Railroad Commission’s motion for summary judgment, but the Court of Civil Appeals reversed and remanded for a trial to determine if the Railroad Commission’s order was supported by substantial evidence.\(^63\)

\[2\] \textit{Utah}

Utah’s provision for agency approval of voluntary unitization agreements is fairly typical of most statutes. There is no procedure set out for board review, but there are the general criteria that the agreement must be in the public interest and prevent waste or conserve oil and gas. In addition, unlike the Texas statute, which is limited to unitization agreements for secondary recovery purposes, the Utah statute allows unitization for almost any purpose so long as waste is prevented, correlative rights protected, and oil and gas conserved. The statute provides:

\begin{quote}
40-6-7 Agreements for repressuring or pressure maintenance operations – Agreements for development and operation of a pool or field.
\end{quote}


\(^{61}\) J. Weaver, \textit{Unitization of Oil and Gas in Texas: A Study of Legislative Administration, and Judicial Policies} 177-179 (1985). In her study, Professor Weaver examined the voluntary unitization agreements approved in 1976. Only one had less than 90% working-interest consent, and the same one was the only agreement showing less than 70% approval by royalty owners. Almost all of the remaining applications showed more than 95% approval by working-interest owners. Id. at 178.


\(^{63}\)For a discussion of the scope of judicial review of Railroad Commission orders, see \textit{infra} § 25.06[22].
(1) An agreement for repressuring or pressure maintenance operations, or cycling or recycling operations, including the extraction and separation of liquid hydrocarbons from natural gas, or for carrying on any other methods of unit or cooperative development or operation of a field or pool or a part of either, is authorized and may be performed, and shall not be held or construed to violate any statutes relating to trusts, monopolies, or contracts and combinations in restraint of trade, if the agreement is approved by the board as being in the public interest and promotes conservation, increases ultimate recovery and prevents waste of oil or gas provided the agreement protects the correlative rights of each owner or producer.

(2) A plan for the development and operation of a pool or field shall be presented to the board and may be approved after notice and hearing.64


The Wyoming provision is similar to the Utah provision, but it adds a further protection for unit operators from potential liability under the antitrust laws. While the Utah provision requires agency approval in order to receive whatever immunity is granted, the Wyoming statute adds a provision stating that unitization agreements that do not get agency approval are not to be implied as evidence showing violations of the appropriate antitrust statutes. The statute provides as follows:

30-5-110...

(a) An agreement for waterflooding or other, recovery operations involving the introduction of extraneous forms of energy into any pool, repressuring or pressure-maintenance operations, cycling or recycling operations, including the extraction and separation of liquid hydrocarbons from natural gas in connection therewith, or for carrying out any other method of unit or cooperative development or operation of one (1) or more pools or parts thereof, is authorized and may be performed, and shall not be held or construed to violate any of the statutes of this state relating to trusts, monopolies, or contracts and combinations in restraint of trade, and may be submitted to the commission for approval as being in the public interest or reasonably necessary to prevent waste or to protect correlative rights. Approval of such agreement by the commission shall constitute a complete defense to any suit charging violation of any statute of this state relating to trusts, monopolies, or combinations in restraint of trade on account of such agreement or on account of operations conducted pursuant thereto. The failure to submit such an agreement to the commission for approval shall not for that reason imply or constitute evidence that such agreement or operations conducted pursuant thereto are in violation of laws relating to trusts, monopolies and combinations in restraint of trade.65

64 Utah Code Ann. § 40-6-7.[30.4A infra].

§ 18.01 Introduction

Every major producing state, other than Texas, has a compulsory unitization statute. Louisiana probably had the first compulsory unitization statute, but it was limited to recycling of gas.
Oklahoma was the first state to have a compulsory unitization law, which was enacted in 1945 and was substantially amended in 1951. The constitutionality of the Oklahoma law was upheld in *Palmer Oil Corp. v. Phillips Petroleum Co.* Since then, states have adopted or amended compulsory unitization statutes that range from the short and terse to the lengthy and prolix. The following states have compulsory unitization statutes: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, and Wyoming.
While the statutes vary considerably as to length and breadth, there are many common features in most of the compulsory unitization statutes. When the statutes are short, there must be administrative regulations that supply the meat to the skeleton of the statute. For example, the Tennessee State Oil and Gas Board is granted power to require unitization by the following terse statutory grant of authority:

The board shall have jurisdiction and authority:

... (4) to make rules, regulations, and orders for the following “purposes... 
   (K) To regulate secondary recovery methods;... 
   (N) To provide that the board may, in the absence of voluntary agreement and after a sixty day notice to owners, force a volumetric or surface poolwide unit, provided that the pool producers owning more than fifty percent (50%) of the pool acreage request such unitization of the pool; 
   (O) In the absence of an acceptable plan of unitization by the operators, the board may shut in the pool to prevent waste and to protect correlative rights until an acceptable plan is presented by the operators.”

The brevity would be a welcome relief to those who practice in Oklahoma, where the compulsory unitization statute covers fifteen different sections and runs several pages. Most of the statutes are more like the Oklahoma statute than the Tennessee statute. Most compulsory unitization statutes impose both procedural and substantive requirements on the parties seeking a compulsory unitization order. All of the statutes designate who can initiate an application or petition for an order although there is not universal agreement on who should allowed to file. Either the statute or the conservation agency regulations will specify the minimum amount of information that is required to be included in the petition. Where the compulsory unitization statute can only be used for limited purposes, the application will have to contain information showing that the unitization will achieve those designated purposes. In states where unitization can be compelled to achieve the broad goals of preventing waste, conserving oil and gas, and protecting correlative rights, the application need only show in a general way that those goals will be achieved.

In most jurisdictions the compulsory unitization provisions do not set forth a separate notice and hearing requirement. The otherwise applicable notice and hearing prerequisites that may be set forth in other sections of the conservation act or the state administrative procedure’s act will usually be incorporated by reference into the unitization provisions. Constitutional requirements for notice and the right to a hearing requirements for notice and the right be complied with regardless of what the statute or regulations provide for.

38 See § 18.02[1], infra.
The substantive requirements for a compulsory unitization order are usually contained in the provisions that require the agency to make certain findings prior to its entry of the order.40 This information must be contained in the petition and presented to the agency during the hearing process. Again, as a possible jurisdictional prerequisite to the entry of the order the agency must find that the statutory purposes for which compulsory unitization is allowed must be included in the order. In addition to this general finding, many statutes contain a list of other mandatory findings that must be included in the order. Most statutes require that a minimum percentage of either or both working and royalty-interest owners consent to the unitization and unit operating agreements. In addition, many statutes require a finding that the order covers a single common source of supply or part thereof. Other finding requirements usually include material relating to the increase in hydrocarbon production that will follow the unitization, an adequate description of the unit area, and that the unitized operations are economically feasible. Finally, almost all of the compulsory unitization statutes require that the unitization and unit operating agreements that will govern the unit be submitted with the petition and approved by the state conservation agency.41 These agreements govern the operation of the unit, the allocation of costs and benefits, the effect the agreements may have on individual leasehold obligations, the duties and powers of the designated unit operator, the method by which the working-interest owners participate in operating decisions, and the procedures to be followed in expanding, contracting, or terminating the unitization agreement. It is important for the practitioner to be not only fully aware of the statutes, but the conservation agency rules or regulations that may govern both the procedures to be followed and the substantive decision as well. Many state conservation agencies regularly publish their internal rules or regulations, and parties who are planning to use the compulsory unitization process must be intimately aware of those internal rules.

§ 18.02 Procedures

The administrative procedures for establishing a reservoir-wide unit are in many cases very similar to those for compulsory pooling. As discussed in Chapters 11, 13, 14, and 15 supra, however, there is a great deal more preparation required for a compulsory unitization procedure than for a compulsory pooling procedure. Initially, one major difference between pooling and unitization statutes is that before one can seek a compulsory unitization order, it is necessary to have the consent of a specified percentage of working and royalty-interest owners. The range of minimally acceptable ratification runs from approximately 65% to 85%. The major problem in getting that level of voluntary agreement will be in the negotiation of the participation formula. The participation formula for compulsory pooling is usually surface acreage, while the range of factors, discussed in Section 17.02[5], that can go into a compulsory unitization allocation formula is almost infinite in its variety. Factors such as porosity, permeability, acre-feet of productive sands, actual production, surface acreage, past productivity, number of wells and the status of the wells

41 See § 18.03 infra.
under the Windfall Profits Tax, or the Natural Gas Policy Act may be considered in establishing a participation formula for the unit.

[1] Application

The compulsory unitization process is normally initiated by a petition or application by an interested party. No state statute specifies a particular form to be used, but again one must check with the state conservation agency’s rules or regulations which might have a form or suggested model to follow if one is seeking a compulsory unitization order. Most of the state statutes require that the petition be filed by an interested party without defining “interested party.” Some states such as Kansas and New Mexico only allow a working-interest owner to file the petition. Finally, some states allow the state conservation agency on its own motion to seek a compulsory unitization order.

While the specific form may not be statutorily mandated, most states require that certain information be included in the application. At a minimum these requirements cover such matters as:

(1) A map or plat of the proposed unit area;
(2) A list of the names and address of all of the owners of interests within the proposed unit boundaries;
(3) A statement of the proposed operations and how they will achieve the statutory purposes;
(4) A proposed unitization plan;
(5) A proposed unit operating plan; and
(6) All facts necessary to allow the agency to make the requisite findings.

At one time several state compulsory unitization statutes were quite limited in the purposes for which the interests could be unitized. Until 1960, the Louisiana compulsory unitization process was limited to gas recycling operations. In that year it was amended to include almost all enhanced-recovery operations, and the language was much more comprehensive in scope.

The Kansas unitization statute that follows is a good example of what may be required in the filing of the petition. In many states, the statutory mandate is less complete, and applicants should refer to the agency rules and regulations. The Kansas statute provides:

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46Compare la. Rev. Stat. Ann. § 30:5B with § 30:5C. In Hunter v. Hussey, 90 So. 2d 429,6 O.&G.R. 1172 (la. App. 1956), the inability of the proponents of unit operation to resort to the compulsory unitization process was evident. The proposed plan did not involve gas recycling but a proposed water-injection program. The court found that the commissioner had not compelled unitization with his order, but had merely approved the secondary recovery operations that were part of a voluntary unitization. The commissioner could not order the non-consenters to be joined, but he could sanction the operations and authorize a transfer of allowables.
55-1303 Requisites of Application.

Any working interest owner may file an application with the commission requesting an order for the unit operation of a pool or part thereof. The application shall contain:

(a) A description of the land and pool or part thereof to be so operated termed the unit area;
(b) A statement of the type of operations contemplated for the unit area;
(c) A copy of a proposed plan of unitization which the applicant considers fair, reasonable and equitable;
(d) A copy of a proposed operating plan covering the manner in which the unit will be supervised and managed and costs allocated and paid;
(e) An allegation of the facts required to be found by the commission under K.S.A. 55-1304.

Upon filing of an application for an order providing for the unit operation of a pool or part thereof, the commission shall promptly set the matter for hearing and shall cause notice of the hearing to be given as provided in this act.47

[2] Notice

The notice requirements for compulsory unitization statues are usually not set for the in the section dealing with compulsory unitization. Instead the compulsory unitization provisions normally refer back to the notice provisions that generally apply for agency hearings and orders. Constitutional protection of procedural due process rights may require more notice than the statutes and regulations provide. An extensive discussion of the general notice requirements, both constitutional and statutory is presented Section 11.04 supra, and will not be repeated here.

The Oklahoma Statute quoted in part below is a good example of how the states deal with the general problems of notice in compulsory unitization proceedings.

287.6 - Notice - Appeal

Except as otherwise expressly provided, all proceedings had under this Act [the compulsory unitization statute] including the filing of petitions, the giving of notices, the conduct of hearings and other actions taken by the Commission shall be in the form and manner and in accordance with the procedure and procedural requirements provided in Sections 84 to 135, inclusive, Title 52...48

In Olansen v. Texaco, Inc.,49 the court was faced with two issues. The first one

related to who must notice be given in a proceeding for compulsory unitization. The second issue asked who can give approval or consent for the purposes of meeting the minimum consent requirement. In this case the Olansens owned a royalty interest in a 40-acre tract, which was held by production from a Texaco well but for which they were receiving no royalties since they had not signed a pooling agreement, and there was no entirety clause in their lease. When Texaco presented its petition for compulsory unitization, it did not include the Olansens as owners of any mineral or royalty interest, because they relied on their own records and not those in the county recorder’s office. The lease of the Olansen property had a notice of ownership change clause with which the Olansens had never complied. That clause exempted Texaco from liability up until the compulsory unitization order was issued. The effect of the compulsory unitization order was stated in the statute, which provided:

Property rights, leases, contracts, and all other rights and obligations shall be regarded as amended and modified to the extent necessary to conform to the provisions and requirements of this Act and to any valid and applicable plan of unitization or order of the Commission made and adopted pursuant thereto, but otherwise to remain in full force and effect.\(^{50}\)

The Olansens became entitled to share in the unit production from the moment the unit was created. There is nothing in the act that would allow Texaco to rely on its own records, rather than the official county records in determining the true owners of all interests located within the unit area. Texaco could not consent to the agreement for the Olansens and denied their constitutional right to notice by failing to make an adequate and reasonable inspection of the public records that would have allowed for personal notice to have been served.

[3] Hearing

All of the compulsory unitization statutes require that a public hearing be held prior to the entry of the order. In general, the hearing requirements, like the notice requirements, are generally applicable for all agency orders. The hearing requirements have been discussed at length at Section 11.05 supra. The following excerpt from the New Mexico Oil Conservation Division’s rules relating to hearing procedures is typical of the way many states deal with hearings in general and hearings relating to requests for compulsory unitization orders.

Rule 1210. Conduct of Hearings

Hearings before the Commission or Examiner shall be conducted without rigid formality. A transcript of testimony shall be taken and preserved as a part of the permanent record of the Division. Any person testifying in response to a subpoena issued by the Commission or any member thereof, or the authorized representative

\(^{50}\) Okla. Stat. Ann. Tit 52, § 287.9 quoted at 587 P.2d at 98.
of the Division Director, any person seeking to testify in support of an application or motion or in opposition thereto, shall be required to do so under oath. However, relevant unsworn comments and observations by an interested party will be designated as such and included in the record. Comments and observations by representatives of operators’ committees, the United States Geological Survey… and other competent persons are welcomed. Any Examiner legally appointed by the Division Director may conduct such hearings as may be referred to such Examiners by the Director.

Rule 1211. Power to Require Attendance of Witnesses and Production of Evidence

The Commission or any member thereof… has statutory power to subpoena witnesses and to require the production of books, papers, and records in any proceeding before the Commission or Division…

Rule 1212. Rules of Evidence

Full opportunity shall be afforded all interested parties at a hearing to present evidence and to cross-examine witnesses. In general, the rules of evidence applicable in a trial before a court without a jury shall be applicable, provided that such rules may be relaxed, where, by so doing, the ends of justice will be better served. No order shall be made which is not supported by competent legal evidence. 51

This again emphasizes the need to check the local rules or regulations of the state conservation agency prior to seeking a compulsory unitization order. The formality, or informality, of the hearing will in large part depend on the state agency and its rules.


[a] General Findings

All of the compulsory unitization statutes, with the possible exception of Tennessee’s, require the state conservation agency to make certain findings as a condition precedent to the issuance of a compulsory unitization order. There are normally two different kinds of findings that are required. The first relate to general findings such as a finding that the order will be in the public interest or that it will prevent waste and protect correlative rights. The following Utah statutory provision is a good example of a general findings requirement:

40-6-8 Field or pool units

(2) The board shall make an order providing for the unit operation of a pool or part of it, if the board find that:

51 New Mexico Oil Conservation Division, Rules and Regulations (1987).
(a) Such operation is reasonably necessary for the purposes of this chapter; and

(b) The value of the estimated additional recovery of oil or gas substantially exceeds the estimated additional costs incident to conducting such operations.\(^\text{52}\)

In addition to the general findings listed above, a number of states require general findings relating to the feasibility of the proposed operations and that the proposed unitization plan is fair and equitable.\(^\text{53}\)

[b] Consent Requirements

With the possible exception of Alaska\(^\text{54}\) and Washington,\(^\text{55}\) all of the compulsory unitization statutes require that the applicant for the order have the consent or approval of a minimum percentage of the working- and royalty-interest owners before the order is issued or becomes effective.\(^\text{56}\) Oklahoma has one of the lowest consent requirements, 63%,\(^\text{57}\) while most states require 75% consent.\(^\text{58}\) A few states have even higher percentage requirements, which creates substantial problems in putting together the necessary consent.\(^\text{59}\)

The statutes vary as to how the “votes” are to be tallied in determining consent. Some states merely refer to the surface acreage contributions of the unitized interests.\(^\text{60}\) There is little dispute regarding this method of calculating the minimum consent requirements, except when title disputes may arise. One of the weaknesses of the area voting method is that it discounts the potential variation between the economic values of the area control as opposed to reservoir control. A relatively small acreage owner who is sitting on top of the thickest part of the formation does not exercise the power he arguably deserves

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\(^{52}\) Utah Code Ann. § 40-6-8 (2).


\(^{54}\) Alaska Stat. § 31.05.110.

\(^{55}\) Wash. Rev. Code § 78.52.330.

\(^{56}\) An Initial question may be raised as to why most states have consent requirement. Is it constitutionally required? The answer seems to be no if one follows Palmer v. Phillips Petroleum Corp., 204 Okla. 543, 231 P.2d 997 (1951), dismissed for want of a substantial federal question sub nom., Palmer Oil Corp. v. Amerada Petroleum Corp. 343 U.S. 997, 1 O.G&R. 876 (1952). The Oklahoma Compulsory unitization statute that was being challenged had a 50% working-interest owner consent provision, as well as a 15% veto provision. It did not, however, have any requirements for consent by the royalty owners. The royalty owners argued unsuccessfully that they were denied due process of law being excluded from the consent provisions. The Oklahoma Supreme Court treated the consent issue as one of legislative grace. It stated: The question is not the wisdom of rationing the right of protest to the lessees while withholding it from the royalty owners, but whether it was within the power of the Legislature to do so. It was within the power of the Legislature to do so because being within its police power to enact the law without the consent of either lessees or royalty owners it was optional with it to require the consent of either. Where privilege is granted to some in such situations the Constitution is satisfied if all similarly situated are treated alike. 231 P.2d at 1004.

\(^{57}\) Okla. Stat. Ann. Tit. 52, § 287.5. See also Nev. Rev. Stat. § 522.0834 requiring consent of 62.5%.


\(^{59}\) For criticism of the 85% requirement of the Mississippi Compulsory Unitization Statute, see Custy & Knowlton, “Compulsory Field-Wide Unitization Comes to Mississippi,” 36 Miss L.J. 123, 126 (1965). Mississippi has since lowered its consent requirement to 75%. Miss. Code Ann. § 53-3-109. See also Wyo. Stat. § 30-5-110, which sets an 80% consent requirement but allows the state agency to lower the requirement to 75% if good faith negotiations have occurred and the 80% figure is unattainable.

\(^{60}\) See, e.g. Miss. Code Ann. § 53-3-107,
in relation to a large acreage owner who owns lands over relatively poor parts of the reservoir.

A second measure of consent uses a cost factor and thus only deals with working-interest owners. The ultimate weight given the owner is based upon the expected share of unit expenses that the owner will pay. This is an economically-based measure, since in most cases the costs are to be shared not on a surface acreage basis but on some formula based on the amount of reserves or productive capabilities that the working-interest owner controls. The cost factor mechanism may be combined with a separate provision for measuring the votes of the royalty-interest owners.61

The third method for determining consent uses production as the principal factor. Production relates to the right of the affected party to receive production or the proceeds from production from the unitized operations. Louisiana uses a production factor test to determine consent, both as to royalty-and working-interest owners.62 Obviously the choice of a participation formula in the proposed unitization agreement will determine the weight to be given each owner. This might lead to extended negotiations when the vote is close to the minimum required, so that by changing the participation formula, one can change the outcome of the vote.

Another significant problem arises when it comes to tallying the votes of royalty owners in those states where their consent is also required. How should their votes be counted? Should it be on the basis of surface acreage, regardless of the percentage of royalty that has been reserved? What about overriding royalty-interest owners carved out of the working interest? Do they get a vote? Some states such as Louisiana statutorily exclude such owners from voting as royalty owners.63 Unfortunately there are no clear answers to some of these questions.

On whether the royalty interests should be weighted by something other than a surface acreage basis, there is little statutory or judicial guidance. Professors Williams and Meyers suggest that when the statute is silent, the agency should adopt a formula that weights the vote depending on the size of the royalty. For example, if A and B are royalty owners and each contributes the same amount of surface acreage to the unit, and A has a 1/4 royalty and B a 1/8 royalty, then A should have twice the voting weight of B.64 Instead of a surface-acreage formula one would use a “royalty acreage” formula with the standard 1/8 royalty on 1 acre, constituting 1 royalty acre. To the extent that the consent provisions are included in order to give those who are most economically interested in the proposed unitization a chance to veto the plan, the economic interest test or “royalty acreage” formula works well. The smaller the fractional royalty interest owned and the smaller the acreage means a lesser weighted vote for the small-royalty owners. But even this calculation ig-

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nores the volume-in-place factor, so that a 1/8 royalty owner of a particularly rich and deep location would not have as much voting power as a 1/4 royalty owner of a shallower, marginal location.

The second problem relating to owners of overriding royalty interests is even more difficult to resolve. Three states, Louisiana, Mississippi, and Wyoming, have attempted to discount the votes of overriding royalty-interest owners by changing their compulsory unitization statutes. The problem could relate to the creation of overriding royalty-interests to manipulate the consent requirements, where the lessor/royalty owners have not agreed to the unitization agreement. Perhaps, if needed, overriding royalty owners should be given their own category, or perhaps they should be totally omitted from the consent requirement. The proper approach relates to the purposes of the consent requirement and whether they would be served by having an additional group, with potentially different viewpoints than lessees and lessors, having a veto power over the compulsory unitization process. It is the authors’ view that compulsory unitization is difficult to achieve in spite of its important public and private benefits, which should not be further impeded by the addition of another group to the consent requirement.

Another consent issue relates to the time of agency approval. Several states, including Arkansas and Louisiana, specifically require that the consent be shown in the petition seeking compulsory unitization. The Arkansas statute provides in part:

If, after hearing and considering the petition and evidence offered in support thereof, the Commission finds that:

(a) The proposed unit agreement has… been executed by persons who, at the time of filing of the petition, owned of record legal title to at least an undivided seventy-five percent (75%) interest in the right to drill...

Some states allow the consent to be attained within a time period after the compulsory unitization order is initially issued by the agency. The two most common time frames are six or twelve months. In many states the deadline is not final, in that the expiration of the period may merely lead to a supplemental hearing. In Wyoming, not only does the statute provide for a supplemental hearing, but the proponents of a supplemental hearing, but the proponents of the compulsory unitization can seek to lower the consent requirements form 80% to 75%.

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No order of the commission authorizing the commencement of unit operations shall become effective until the plan of unitization has been signed or in writing ratified or approved by those persons who own at least eighty percent (80%) of the unit production or proceeds thereof that will be credited to royalty and overriding royalty interests which are free of costs, … However, to the extent that overriding royalty interests are in excess of a total of twelve and one-half percent (12 1/2%) of the production from any tract, such excess interests shall not be considered in determining the percentage of approval or ratification by such cost-free interests.

70 Wyo. Stat. § 30-5-11 (f)
In Oklahoma which allows for this grace period between initial approval of the compulsory unitization order and attaining the minimum consent requirements, there has been some litigation concerning the effect of the initial order. In *Eason Oil Co. v. Corporation Commission*,\(^{71}\) the Corporation Commission, had issued the order, which was effective immediately but subject to the ratification of the unitization plan by the minimum percentage required. A six-month time limit was placed on the proponents to achieve the consent requirements. An opponent of the order challenged it on the basis that it was void because it created the unit prior to the receipt of the necessary consent. The Oklahoma statute provided:

No order of the Commission creating a unit and prescribing the plan of unitization applicable thereto shall become effective unless and until the plan of unitization has been signed, or in writing ratified or approved by lessees of record of not less than sixty-three percent (63%) of the unit area affected thereby… Where the plan of unitization has not been so signed, ratified or approved by lessees and royalty owners owning the required percentage of royalty owners… at the time the order creating the unit is made, the Commission shall, upon petition and notice, hold such additional and supplemental hearings as may be requested or required to determine if and when the plan of unitization has been so signed, ratified or approved… In the event lessees and royalty owners, or either…have not so signed, ratified or approved the plan of unitization within a period of six (6) months from and after the date on which the order creating the unit shall cease to be of further force and effect and shall be revoked by the Commission.\(^{72}\)

The court found that although the compulsory unitization order had been issued, it was not effective until it was shown that the necessary consent had been achieved. In Eason, the issue was not material since there had been no attempt to implement the order between the time it was first issued, and the time that consent was shown.\(^{73}\) Another issue relating to consent is the relationship between a leasehold unitization clause and the statutory consent requirement. While leasehold unitization clauses are not in widespread use they are occasionally included, especially in the Rocky Mountain area. The following is a typical example of a unitization clause:

Lessee shall have the right to unitize, pool or combine all or any part of the above described lands with other lands in the same general area by entering into a


\(^{72}\) Okla. Stat. Tit. 52, § 287.5.

\(^{73}\) The court said:

After Order… on October 31, 1973, supplemental hearing was held February 4, 1974. Order… dated February 19, 1974, determined the fact of the required ratification. It then ordered the plan of unitization to be in effect and the lessees could proceed with the unitized management, operation and further development of the unit area…. This record shows no attempt to effect the unit or seek to implement the plan until the required ratification and determination of that fact on February 19,1974, by supplemental order. The statutory necessity of ratification and determination of that fact was accomplished before any attempt, other than to secure the ratification required by law, to effect the order creating the unit and the plan of unitization. 535 P.2d at 289. A similar result was reached in Price v. Corporation Commission, 382 P.2d 425, 18 O.&G.R. 1051 (Okla, 1963), in which the court found that the preliminary order was not final and could not become final until the commission had in fact determined that the requisite approval had been received for the plan of unitization.
cooperative or unit plan of development or operation approved by any governmental authority and from time to time with like approval to modify, change or terminate such plan or agreement and in such event the terms, conditions, and provisions of this lease shall be modified to conform to the terms. Conditions, and provisions of such approved cooperative or unit plan of development or operation and, particularly all drilling and development requirements of the lease express or implied shall be satisfied by compliance with the drilling and development requirements of such lease, and this lease shall not terminate or expire during the life of such plan or agreement… Lessor shall formally express lessor’s consent to any cooperative or unit plan of development or operation adopted by lessee and approved by any governmental agency by executing the same upon request of them.

Up until the last sentence of the clause the provision merely gives the lessee the power to unitize the leasehold estate without receiving the further consent of the lessor. The provision also is similar to the pooling clause, insofar as leasehold obligations are to be modified or conformed to the unitized status of the lease. In the absence of the final sentence, the power to unitize the lessor’s interest is not the same as the power to give one’s consent for purposes of meeting a state’s compulsory unitization statutory royalty interest will be unitized, but the lessor has not agreed to waive its right to participate in the public consent requirements to the exercise of the state’s police power to force unitize. Thus, while the unitization clause will operate to unitize the royalty interest the royalty owner/lessor should be able to exercise its voice in determining whether the petitioners for a compulsory unitization order have complied with the minimum consent requirement. The last sentence of this particular clause, however, seemingly requires the royalty owner to give its formal consent to the lessee’s act of unitization. It could be read as requiring consent to the statutory election for compulsory unitization orders or it could merely be a record-keeping requirement for the private agreement. Since there is no direct reference in the last sentence to the state’s compulsory unitization statute or consent requirements, the authors prefer an interpretation that would still retain the right to consent or not consent with the royalty owner insofar as the compulsory unitization process is concerned.

A final problem with consent may be presented when the unit operator controls more than the minimum percentage required under the state compulsory unitization statute. In Montana74 and North Dakota75 the statutes require that at least one other working-interest owner consent to the unitization agreement before the agency can issue the compulsory unitization order.75.1

[c] Unit Area

In most compulsory unitization statutes, all of a pool or a portion of the pool may be unitized. In many cases, when only a portion of the pool is unitized, the proponents must show, and the agency must find, that there are special considerations existing that justify a

74 D. Cent. Code § 38-08-09.5.
75 N. D. Cent. Code § 38-08-09.5.
75.1 See also NM Stat. Ann. § 70-7-8.
partial pool unitization. The Montana statute is an example of how states deal with unitization of a part of a pool: An order may provide for unit operations on less than the whole of a pool where the unit area is of such size and shape as may be reasonably required for that purpose and the conduct thereof will have no adverse effect upon other portions of the pool.76

In *Spiers v Magnolia Petroleum Co.*,77 the partial pool provisions of the Oklahoma compulsory unitization act were challenged as violative of the United States and Oklahoma Constitutions. The court rejected the challenge and found that the Corporation Commission’s statutorily mandated findings for partial pool unitizations were supported by substantial evidence in the record.

A problem arose in Mississippi in the establishment of a unit for the Smackover Pool in the Lake Como Oil Field. In *Petro Grande, Inc. v. Texas Pacific Oil Co.*,78 the dispute was over the statutory requirement that no unitization of a field could be approved by the board until each drilling unit in the field was drilled.79 A dry hole had been drilled in one of the drilling units. The court ruled that the dry hole met the statute’s requirement for a well and that there was sufficient evidence in the record to support the board’s order designating the unit’s boundary line.

There was additional litigation that arose in connection with the Lake Como unitization plan. In *State Oil and Gas Board v. Brinkley*,80 the Oil and Gas Board had denied an application for the establishment of a drilling unit in which the applicant had acreage where a dry hole had been drilled. Another working-interest owner thought the lands adjacent to the dry hole were productive and sought inclusion in the unit. The unit application was filed during the period of time the application for a drilling unit was being considered. This area was the subject of the *Petro Grande* decision. While there was conflicting geological evidence, the Supreme Court found that there was substantial evidence to support the board’s finding that barren acreage was included in the drilling unit application, and therefore it should be denied. Nonetheless, the board in the unitization hearing granted the petition to join the unit, although some of the alleged barren acreage was excluded from the fieldwide unit.

Another problem with some compulsory unitization statutes is that they require the unit area to be defined as those lands that are shown to be productive by drilling or development. That might work well for the operational unit, but it would create problems for developmental units where the outside boundaries of the unit area may not have been defined by actual drilling activities. These statutes have been construed not to require that every tract within the proposed unit area be drilled in order to be included.81 The Oklahoma

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79 The statute provides in part: "No field unitization shall be approved by the board until each drilling unit of the field has been drilled; however, the board is hereby authorized to waive the requirement that each and every drilling unit be drilled upon a finding of fact that it not economically feasible for a specific drilling unit to be drilled.” Miss. Code Ann. § 53-3-103.
80 State Oil & Gas Board v. Briskly, 329 So. 2d 808, 55 O.&G.R. 59 (Miss. 1976).
statute is a good example, although it uses the term "common source of supply" rather than "pool" or "reservoir." It provides in part:

Each unit and unit area shall be limited to all or a portion of a single common source of supply. Only so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual drilling operations may be so included within the area.\textsuperscript{82}

Even though the Oklahoma statute appears to limit a compulsory unitization order to a single source of supply, the Corporation Commission has on several occasions unitized multiple reservoirs that are being produced from single wellbores. These orders have also been upheld against ultra vires challenges.\textsuperscript{83} For example, in \textit{Jones v. Continental Oil Co.},\textsuperscript{84} the Corporation Commission created a fieldwide unit affecting 1,230 acres. The area was underlain by 21 producing “Pennsylvania Sand Members” or stringers. There were found by the Corporation Commission to constitute a single common source of supply as a result of years of multiple completion and production practices. While the stringers may have been separate common sources of supply in their natural state, they were no longer separate at the time the compulsory unitization order was entered.

Finding that a common source of supply underlies the proposed unit boundary will be sustained if there is substantial evidence in the record to support the findings. In \textit{Palmer Oil Corp. v. Phillips Petroleum Co.},\textsuperscript{85} the protestants charged that several common sources of supply were joined in a single unitization order and that the area included in the unit had not been determined by drilling operations. The court found evidence that the reservoirs were not separate but were commingled so as to permit the migration of oil from one reservoir to another. On the issue of ascertaining the extent of the area boundaries by actual drilling the court said:

\begin{quote}
Actual drilling upon the undrilled tracts or within a definite proximity thereto is neither prescribed by the statute nor by law... The only prescription is that the source of supply must have been reasonably defined thereby... There is unanimity in the testimony herein that the well drilled afforded sufficient evidence to define the common source of supply...
\end{quote}

Thus, even when there is a lack of drilling activities, the state conservation agency may still allow acreage to be placed into a unit if the evidence shows that the common source of supply underlies that acreage.

\textsuperscript{82} Okla. Stat. Ann. tit. 52, § 287.4. See also Miss. Code Ann. § 53.3-103: These statutory requirements would seemingly preclude the inclusion of known barren acreage within a compulsory unitization order. There are no reported cases on the subject, probably due to the fact that unit area boundaries can change under the terms of the agreement. In a compulsory pooling situation, however, the Michigan Supreme Court found that one could not force-pool known barren acreage and include that acreage in the participation formula. Manufacturers National Bank of Detroit v. Director, Department of Natural Resources, 362 N.W. 2d 572, 84 O.&G.R. 103 (Mich. 1984), prior cases reported at 320 N.W.2d 403,74 O.&G.R. 479 (Mich. App. 1982), 270 N. W.2d 550, 62 O.&G.R.


\textsuperscript{85} 231 P.2d at 1010.
[d] Enlargement and Amendment

Most state compulsory unitization statutes authorize both the unit and unit operating agreements to be amended, usually under the same conditions that governed the unit’s original formation. In addition to amendment, most statutes require that the compulsory unitization order allow for the enlargement of the unit area. The Oklahoma statute quoted here is typical:

The unit area of a unit may be enlarged to include adjoining portions of the same common source of supply, including the unit area of another unit, and a new unit created for the unitized management, operation and further development of such enlarged unit area, or the plan of unitization may be otherwise amended, all in the same manner, upon the same conditions and subject to the same limitations as herein provided with respect to the creation of a unit in the first instance, except that where an amendment to a plan of unitization relates only to the rights and obligations as between lessees the requirement that the same be signed, ratified or approved by royalty owners of record of not less than sixty-three percent (63%) of the unit area shall have no application.87

The problems relating to the enlargement of a reservoir-wide unit are different from those relating to a single well drilling unit. One problem relates to the need for a change in the participation formula. In State Oil & Gas Board v. Seaman Paper Co.88 the Citronelle Field in Alabama was involved. It had originally been created out of 139 tracts in 1961, and an additional 108 tracts were placed into the unit in 1962. In 1965, invitations were extended to the operators of wells on an additional 94 contiguous tracts to join the unit. The Oil and Gas Board was then requested to approve the addition of the 94 tracts. Certain royalty owners challenged the board’s decision to admit the additional tracts based on an alleged misallocation of unit production between old and new tracts. The board’s order did not delegate to the Unit Manager the power to make allocations, it merely instructed the manager to put into effect the allocations made by the board. The statute at the time provided: “The board, by entry of new or amending orders, may from time to time add to unit operations portions of pools, not theretofore included and extend the unit area as required.” It also provided that the allocation of production should be based on the “relative contribution” of the added pool or pools.

The order also incorporated the unitization agreement by reference. The agreement called for two different types of enlargement: automatic and negotiated. Seaman Paper involved a negotiated enlargement. The old tracts shared on a three-factor formula: six months of production, micro-log acre-feet, and oil-in-place equivalent foot. The new tracts shared on a different two-factor formula: six months of production and net-productive-acre-feet. The court agreed that the new participation formula was authorized by the unitization agreement and the statute. There was evidence to support the board’s conclusion that the

“relative values” of the old and new tracts were fairly represented by the application of two different formulas. In addition to having to prove that the “relative value” of the new tracts was adequately represented by the new formula, the unit operators had to have 75% of both the working and royalty-interest owners in the old unit approve the negotiated enlargement before it would become effective. In this case, the order was entered but would not become effective unless the consent was obtained within six months.

What happens to a compulsory unit when a party not originally included in the unitization agreement wants to join? In *Cornelius v. Arkansas Oil & Gas Commission*, the Arkansas Supreme Court allowed an adjacent owner to muscle-in even though he could not show that he had received the statutory 75% consent from working-interest owners. The McKamie-Patton Pool was unitized in 1948 with some 16 sections in the original unit. It was enlarged in 1950 and again in 1960. Petitioners had sought to have their 14.4-acre tract included in the unit or, in the alternative, to be given a permit to drill. The petition to join the unit was denied because they could not show that the enlargement had received the necessary 75% approval. The court found that the only consent that was required was the consent of the party seeking to join; and not the consent of those already in the unit. The opinion may have been influenced by uncontroverted testimony that unit activities were draining hydrocarbons from beneath the plaintiff’s tract. The statute then applicable allowed the unit to be enlarged on the terms set out in the approved unit operating agreement. The unit operating agreement provided for enlargement without the consent of the unit’s working-interest owners, and that provision had been used in the prior two enlargements. Therefore, by prior agreement, the parties to the unit operating agreement waived their right to have their interests diminished without expressing their approval.

§ 18.03 Provisions Relating to Contents of Unitization and Unit Operating Plans

[1] General Requirements

Almost all compulsory unitization statutes have extensive requirements relating to the unitization and unit operating plans. As a general matter, the statutes mention the following areas that must be included in either plan and approved by the state conservation agency:

(1) Provisions defining the working- and royalty-interest owners for the purpose of determining who is responsible for their share of expenses.

(2) Provisions relating to the effect of the plans on existing leases, contracts, and division orders.

(3) Provisions that negate the existence of a cross-conveyance of property interests.

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90 Ark. Stat. Ann. § S3-115(C-6). This provision was not carried forward into the new code adopted in 1987. See Ark. Code Ann. §§ 15-72-208 to 15-72-315
Because of the wide range of these statutory provisions, careful study of the individual state statutes is needed to see what the minimum requirements are. To a large degree, these elements are incorporated into most model form unitization or unit operating agreements, including the API Models presented in Volume 3 infra.

[2] Special Problem Areas

In Parkin v. Corporation Commission,92 the court touched on only a few of the many issues that may be raised when a state conservation agency incorporates by reference a private unitization agreement as part of its compulsory unitization order. One question that immediately arises is whether the entire private unitization agreement automatically becomes part of the compulsory unitization order, so that those who have not consented to the voluntary agreement are treated no differently than those who did consent. For example, the voluntary agreement may have provisions that deal with the private rights of the signers of the agreement but that are not directly related to either the prevention of waste, protection of correlative rights, or the conservation of oil and gas. A gas balancing agreement might be included in a unitization agreement, and a question would arise as to whether the parties who have been compelled to join the unit are bound by the balancing agreement.

The Parkin decision raises another issue relating to the incorporation of voluntary agreements into compulsory pooling orders – Can the agency delegate its control over the termination of the unit to the private parties? In Parkin, the Corporation Commission approved a compulsory unitization order, which incorporated by reference the voluntary

91See 6 .H. Williams & C. Meyers, Oil and Gas Law § 913.6 (1988) for another list of statutory provisions relating to the contents of unitization plans.

unitization agreement that had been consented to by most of the working-interest owners. The voluntary agreement had a provision that required a vote of 65% of the working-interest owners to terminate the unit upon their determination that unitized substances could no longer be produced in paying quantities or that unit operations were no long feasible.

The original working-interest owners transferred their interests to Misco after an enhanced-recovery operation was attempted but failed to stimulate production to the extent predicted. Following the assignment, Misco was the owner of more than 65% of the working interest, and it continued to operate a small number of wells, producing a very small amount of oil. Several royalty owners sought an order from the Corporation Commission to terminate the unit, but the commission demurred, stating that the order and its incorporated plan required consent of 65% of the working-interest owners before the unit could be terminated.

The Kansas unitization statute provided as follows:

The order providing for the unitization and unit operation of a pool... shall be on terms and conditions that are just and reasonable and shall prescribe a plan for unit operations that shall include:

...(j) the time when the unit operations shall commence and the manner in which, and the circumstances under which, the unit operations shall terminate...\(^{93}\)

The plan did include a provision relating to termination, however; that provision gave the sole power to terminate to the owner or owners of 65% of the working interests. The court found that the commission could not abdicate or delegate its powers to the private working-interest owners through the incorporation of the voluntary agreement’s terms in the agency order.

The Supreme Court limited the effect of the commission’s adoption of the voluntary unitization agreement. The trial court had found that the unitization plan was binding on the non-consenting interests by virtue of the order. The Supreme Court disagreed and stated:

The original Plan of Unitization was not a contract between all of the royalty and mineral interest owners and all of the working interest owners. Approximately 19% of the royalty and mineral interest owners did not agree to that plan. Unitization was forced upon those people in 1968... The Plan of Unitization, however fair in its provisions as to the workings and operation of the unit, is not a contract which may be enforced against those interest holders who did not agree to its terms and who were included in the unit against their will.\(^{94}\)


\(^{94}\) 677 P.2d at 1001-1002.
What is the difference between being bound by the order and not being bound by the contract that is incorporated into the order? The Parkin court suggests that there is a difference and that the commission cannot merely delegate powers over the nonconsenters to the private parties. But the delegation issue is distinct from the contractual issue. Clearly, the issue of termination of a unit falls within the commission’s powers to protect correlative rights and prevent waste. A different problem would arise if the voluntary unitization agreement included terms that were clearly private in nature and that did not deal with waste or correlative rights. The inclusion of those terms in the order would be ultra vires since the order would go beyond the power delegated to the agency. However, the court in this case said that the termination provisions of the agreement that were incorporated into the order were not binding on the nonconsenters. They were therefore capable of bringing an action before the commission seeking to terminate the unit on grounds other than that provided in the order and its incorporated unitization agreement. In this case, it was an alleged breach of the implied covenant to reasonably develop.95 In a state such as Oklahoma, allowing the commission to terminate a lease for breach of an implied covenant would create substantial conceptual problems with their private law/public law distinction. Could the Corporation Commission determine whether or not the unit operator was acting in a reasonable and prudent matter, which might trigger a termination of the unit? Normally, issues relating to implied covenants are private law matters not subject to agency determination.

Parkin raises more questions than answers. The authors agree that under certain circumstances an agency might not delegate or abdicate its decision-making authority to the unit operator or working-interest owners because it has the over-riding duty to protect the public interest by preventing waste, protecting correlative rights, and conserving oil and gas. But that is a much different proposition than saying that the nonconsenters are not bound by the terms of an order that had incorporated a privately negotiated voluntary unitization agreement, insofar as those provisions meet the statutory requirements and are related to the issues of waste, correlative rights, and conservation.

§ 18.04 Special Issues


[a] Oklahoma

In Eason Oil Co. v. Corporation Commision,96 the court had to decide if the factors listed in the unitization statute were mandatory or permissive. The Oklahoma Unitization Act II provides:

95 For a discussion of how unitization affects implied covenants, see § 20.04 infra.
A separately owned tract’s fair, equitable and reasonable share of the unit production shall be measured by the value of each such tract for oil and gas purposes and its contributing value of each such tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit, taking it into account acreage, the quantity of oil and gas recoverable therefrom, location on structure, its probable productivity of oil and gas. In the absence of unit operations, the burden of operation to which the tract will or is likely to be subjected, or so many of said factors, or such other pertinent engineering, geological, or operating factors, as may be reasonably susceptible of determination.97

The Corporation Commission order had a five-factor formula with varying weights given to each factor. Current production was weighted 30%; the tract’s adjusted oil sales volume for a designated six-month period was weighted 20%; the future primary production was weighted 30%; the tract’s remaining primary reserves utilizing a two-dimensional reservoir simulation model was weighted 10%; and the tract’s hydrocarbon pore volume and reservoir barrels was weighted 10%. An opponent of the plan claimed the order was ultra vires in that the Corporation Commission was limited to the statutory factors in developing a formula. The court concluded that while the order did not use all of the statutory factors, the finding of the Corporation Commission that the allocation formula was fair, reasonable and equitable was supported by substantial evidence. The court treated the statutory factors as “legislative guidelines” and not mandates.98 The court concluded in regard to the legislative factors: Any or all may be included or excluded depending on whether such factors are pertinent. Other pertinent factors may be included. Inclusion of the five factors is not the statutory test,99 thus the Corporation Commission was given substantial discretion to approve allocation formula that varied from the terms of the statute.

Another allocation problem arose in Bingaman v. Corporation Commission.100 The Corporation Commission approved a unitization plan for secondary recovery by the injection of gas or liquid hydrocarbons by the unit operator. Under the plan the operator could recover 50% of the gas produced until the amount recovered equaled the amount injected; if outside liquids were injected, then, commencing one year after the injection, 10% of the liquids would be treated as the lessee’s until the cost of the amount was recovered. Some non-consenting royalty owners challenged the order approving the plan of unitization. They claimed that it was imposing the costs of the secondary recovery project on the royalty owners since it gave a percentage of production directly to the operator. The court rejected the challenge and affirmed the Corporation Commission’s approval of the order. The court concluded:

In our opinion, if the operator is entitled to recover natural gas it purchased from outside the unit area and injected into the reservoir, there would be no logical reason for denying the operator the right to recover liquid hydrocarbons it purchased.

98535 P.2d at 287.
99535 P.2d at 287-288.
outside the unit and injected into the reservoir. In the order, the formula for recovery of the natural gas [purchased] is on a volume basis, and recovery of the liquid hydrocarbons is on a cost basis and both provided a reasonable and practical basis of accounting.\textsuperscript{101}

Thus, the discretion afforded the Corporation Commission to approve order if they contain fair and reasonable terms is fairly broad. The royalty owners' argument was in part based on the traditional rule of capture doctrine, which has been modified by the approval of the plan of unitization. The Corporation Commission has been given the power to modify the rule of capture if it does so in a fair and reasonable manner. The challenged order did not go beyond the lawful powers delegated to the Corporation Commission.\textsuperscript{102}

In Hatlestad \textit{v. Petrocorp Inc.},\textsuperscript{102.1} an unleased mineral owner challenged a compulsory unitization order creating 1,083 acre unit because the participation formula was allegedly grossly unfair to her tract. The unitization order was hotly contested with the administrative law judge taking over 8 days of testimony. Contestants offered their own formula, but eventually the ALJ and the Commission went with the formula advocated by Petrocorp, the unit operator. The formula was based on the following factors:

1. current production, measured by the July 1992 oil rate (when all wells were on line and producing at full allowables);
2. the unit area comprised by each tract;
3. original oil in place, measured by the hydrocarbon pore volume map prepared by the working interest owners' technical committee;
4. remaining oil for the unit as of May 1, 1993, allocated to each tract by looking at the perforations in each well at mid-perforation and calculating the recovery for each of those wells, taking into account primary and secondary remaining reserves by tract.\textsuperscript{102.2}

Plaintiff alleged that she had been discriminated against by the formula, because her tract had never been drilled on. The court of appeals affirmed the Commission order, creating the unit but allocated more barrels of production to her tract than was allocated under the Commission-approved formula. The Supreme Court reinstated the Commission-approved formula, concluding that under the substantial evidence test, the order should be affirmed. Where there is conflicting expert testimony, the Commission choice of which testimony to give credence to should generally not be disturbed.\textsuperscript{102.3}

\textsuperscript{101} 421 P.2d at 638
\textsuperscript{102} The court concluded that: "if the Commission was without power or authority issue an order which had the effect of regulating or abrogating in a measure the law of capture, the royalty owners would be reaping a benefit to the detriment of the operator and such would not be in harmony with... [Okla. Stat. Ann. Tit. 52, § 287.2]." P. 2d at 628.
\textsuperscript{102.1} Hatlestad \textit{v. Petrocorp Inc.}, 928 P.2d 295 (Okla. 1996).
\textsuperscript{102.2}928 P.2d at 297.
\textsuperscript{102.3}928 P.2d at 297. See also Chenoweth \textit{v. Pan American Petroleum Corp.}, 382 P. 2d 743, 18 O.&G.R. 1012 (Okla. 1963).
Wyoming

The allocation formula and the reduced consent provisions of the Wyoming compulsory unitization statute were the subject of the challenge to a compulsory unitization order in Gilmore v. Oil and Gas Conservation Commission. The plaintiff challenged an order of the Conservation Commission that created a fieldwide unit, even though only 75.89% of the working-interest owners consented to the unitization agreement. The field was approximately 18 miles long and 1 to 3 miles in width, embracing about 31,000 acres. It had 177 producing wells at the time of unitization, and the working interests were divided into at least 80 different parties. The reservoir was near bubble point with the success of an enhanced-recovery operation becoming less likely the longer unitization was delayed.

In their voluntary negotiations, the working-interest owners considered a total of 71 different allocation or participation formulas. No single formula was able to receive the consent of the 80% needed to meet the statutory consent requirement. The formula that received the highest level of approval was an eleven-factor formula with varying weights being given to:

1. Usable wells,
2. First six months production,
3. Peak rate,
4. Wellbore net feet,
5. Last three months production,
6. Last six months production,
7. Remaining primary recovery,
8. Ultimate recovery,
9. GLO (General Land Office) developed porosity acre-feet, and
10. GLO porosity acre-feet.

The principal challenge was to the fairness of the parameters and their relative weights. An ancillary challenge related to the inaccuracy of a GLO survey that allegedly shorted the plaintiff of some 33 acres.

The court in reviewing the allocation formula exhibited substantial deference to the agency action. The protection of the plaintiff’s correlative rights could not lead to a result that would cause waste. The allocation formula that had been agreed on was the only means by which the field could be compulsorily unitized. The statutory mechanism for reducing the consent requirement from 80% to 75% had been complied with because of the length and good faith of the negotiations between the working-interest owners. The formula chosen was the only one that would allow for the enhanced-recovery operation to be institute. If of the unitization did not occur, the

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104 Wyo. Stat. § 30-5-110(f).
105 Apparently, in the reported opinion, a factor was omitted since the weight given each factor does not add up to 100% and only 10 factors are listed while the opinion quotes Formula 67 as having 11 factors or parameters. 642 P.2d at 775, 75 O.&G.R.
evidence strongly indicated a substantial waste of oil and gas would ensue. In balancing the need to protect correlative rights, and the need to prevent waste the court stated:

…[Plaintiff] contends that in preventing waste his correlative rights cannot be ignored. We agree, but hold that substantial waste cannot be countenanced by a slavish devotion to correlative rights. We are faced with a delicate balancing problem between prevention of waste and correlative rights, but prevention of waste is of primary importance.

The right to produce one’s fair share from the pool is limited by and subject to the practicalities of the situation and the ability to produce without waste. Other owners have a concomitant right to produce from the pool without waste.\footnote{642 P.2d at 779, 75 O.&G.R. at 185. For other cases that deal with the problem of balancing the sometimes competing interests of protecting correlative rights and preventing waste, see Bernstein v. Bush, 29 Cal. 2d. 773, 177 P.2d 913 (1947); Republic Natural Gas Co. v. State Corporation Commission, 173 Kan. 172, 244 P.2d 1196, 1 O.&G.R. 1152 (1952); Corley v. Mississippi State Oil and Gas Board; 234 Miss. 199, 105 So. 2d 633, 9 O.&G.R. 48 (1958); Pattie v. Oil and Gas Conservation Commission, 145 Mont. 531, 402 P.2d. 596, 23 O.&G.R. 65 (1965); Railroad Commission v. Fain, 161 S.W.2d 498 (1942), writ. ref'd w.o.m.}

The court found that the plaintiffs would receive the benefit of an additional 322,000 barrels of oil, which would be produced only if the unitization plan was approved. While some other formula would have given the plaintiff a slightly larger participation percentage, there was substantial evidence in the record to support the commission’s findings that the approved formula was fair and reasonable and protected the plaintiff’s correlative rights.\footnote{The court frankly stated: “We do not understand what appellant expects to accomplish by his lawsuit except perhaps force a settlement advantageous to him someplace along the line. A reversal here would not give appellant a larger share of the allocation, but would send the case back to the Commission...” 642 P.2d at 781, 75 O.&G.R. at 190. The court also noted that the plaintiff had consented to a number of allocation formulas that would have given him less than the 1.33% he was to receive under the approved formula. For other cases dealing with judicial review of allocation formulas adopted by state conservation agencies, see State Oil and Gas Board v. Seaman Paper Co., 285 Ala. 725 So. 2d 860, 36 O.&G.R. 1 (1970); Humble Oil & Refining Co., v. Wellborn, 216 Miss. 180, 62 So. 2d 211, 2 O.&G.R. 50 (1953); Woody v. Corporation Commissions, 265 P.2d 1102, 3 O.&G.R. 465 (Okla. 1954).}

In \textit{Trout v. Oil and Gas Conservation Commission},\footnote{Trout v. Oil and Gas Conservation Commission, 721 P.2d 1047, 92 O.&G.R. 420 (Wyo. 1986). The court found that the plaintiffs would receive the benefit of an additional 322,000 barrels of oil, which would be produced only if the unitization plan was approved. While some other formula would have given the plaintiff a slightly larger participation percentage, there was substantial evidence in the record to support the commission’s findings that the approved formula was fair and reasonable and protected the plaintiff’s correlative rights.} the Wyoming Supreme Court was again faced with a challenge to a compulsory unitization order principally on the grounds that the allocation formula was unfair. There was a three-factor formula approved by the commission involving:

\begin{enumerate}
\item Last six months production – weighted 47.5%;
\item Remaining proved developed producing reserves – weighted 47.5%; and
\item Original oil in place – weighted 5%.
\end{enumerate}

The largest working-interest owner had proposed the unit for the Teapot Formation, which was to cover approximately 7,400 acres. Several meetings were held, and the principal issues that were contested related to the allocation formula. The formula finally chosen was approved by 82.39% of the working-interest owners and 93.06% of the royalty owners.\footnote{Trout v. Oil and Gas Conservation Commission, 721 P.2d 1047, 92 O.&G.R. 420 (Wyo. 1986).}
owners. Trout was a working-interest owner who did not consent to the agreement with the selected participation formula.

As with Gilmore, the court gave substantial deference to the commission’s finding that participation formula was fair and reasonable and protected the plaintiff’s correlative rights. The court equated a fair and reasonable formula as one that protected correlative rights. While there was some conflict in the evidence that was presented to the commission on the formula, there was substantial and probative expert testimony on the reasonableness of the chosen formula. Allocation formulas are not exact and the range of discretion afforded the commission is broad. It would be contrary to the entire purpose of the compulsory unitization statute to allow small holdouts from challenging the validity of the compulsory unitization order because they did not receive all they expected. The Trout court agreed with the Gilmore conclusion that as between protecting correlative rights and preventing waste, the commission’s primary duty is to prevent waste.109

[c] Arkansas

In Williams v. Arkansas Oil and Gas Commission,109.1 a working interest challenged a compulsory unitization order based on the unfairness of the allocation formula. The unitization was proposed in order to facilitate a secondary recovery project which would increase the potential production from the field from 288,000 barrels of oil to 1.44 million barrels. The commission approved a two-part allocation formula based on whether the production or expenditures occurred as part of the primary of secondary recovery process.109.2 An ambiguity in the allocation formula seemingly allowed the Unit Operator to charge expenses at the Phase II (secondary recovery) level even though the expenses were incurred during Phase I (primary recovery). Arkansas requires that the compulsory unitization order be “fair and reasonable” under the circumstances and allocate production and expenses based on the “relative contribution” to the unit operation.109.3 The court determined that a two-phased formula would be appropriate, but only if the demarcation line was clearly drawn. The potential for allocating expenses at a higher ratio than production was per se unfair and thus the commission order was reversed.

[2] Duty of Lessor to Agree to Unitization

Is a lessor who refuses to agree to a unitization of his or her interest for the purpose of instituting an enhanced-recovery operation barred from asserting the lease’s implied

109721 P.2d at 1052, 92 O.&G.R. at 430. See also Denver Producing & Refining Co. v. State, 199 Okla. 171, 184 P.2d 961 (1947). The court also noted that should the commission later determine that the unitization plan in general or the allocation formula in particular, is not protecting correlative rights, it can immediately shut in the field. See Buck Draw Field v. Oil and Gas Conservation Commission, 721 P.2d 1070 (Wyo. 1986), 94 O.&G.R. 636; and Inexco Oil Co. v. Oil and Gas Conservation Commission, 490 P. 2d 1065, 41 O.&G.R. 428 (1971).
109.1Williams V. Arkansas Oil and Gas Commission, 817 SW 2d 863 (Ark. 1991)
109.2817 SW 2d at 868.
covenant of reasonable development of against the lessee? The Kansas Supreme Court answered that question in the negative in *Rush v. King Oil Co.* The trial court ordered conditional cancellation, with the lessee being given a specific time schedule in which to drill additional wells. The trial court concluded that the wells were lessor was seeking to cancel the lease for failure of the lessee’s assignee to undertake any development beyond the three wells the original lessee had drilled on the 160-acre tract. The assignee asserted that a waterflood program was the only feasible method of recovering additional oil, but the lessor had refused to sign a unitization agreement. Without the unitization agreement, a waterflood program could not be attempted. The likely to produce in paying quantities. The Supreme Court refused to disturb the findings or order of the trial court. It dismissed the defense that secondary recovery was the only feasible means of further development because the trial court had found to the contrary. It found no legal duty on behalf of the lessor to unitize. The holding can be explained not as a rejection of the defense in general but merely that the defendant had not proved his case. Had he been able to show that no new wells would produce a profit, except through unitized, enhanced-recovery operations, and that the lessor had refused to unitize, it should have been a complete defense to an implied covenant to develop cause of action. Since the plaintiff was able to show that individual wells would still be profitable ventures for the lessee, there was not duty to unitize and no defense to the cause of action.

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Appendix F
ALABAMA CODE 1975

Section 1. Sections 9-17-1, 9-17-6, 9-17-12, 9-17-13, 9-17-24, 9-17-80, 9-17-81, 9-17-82, 9-17-84, and 9-17-85, Code of Alabama 1975, are amended to read as follows:

“§ 9-17-1.
“Unless the context otherwise requires, the words defined in this section following terms shall have the following meanings when found in this article:

“(1) BOARD. The state oil and gas board State Oil and Gas Board created by this article.

“(15) DEVELOPED AREA OR DEVELOPED UNIT. A drainage unit having a well completed theron which is capable of producing oil or gas in paying quantities; however, in the event it is shown and the board finds that a part of any unit is nonproductive, then the developed part of the unit shall include only that part found to be productive.

“(14) DRAINAGE UNIT. The area in a pool which may be drained efficiently and economically by one well.

“(6) FIELD. The general area, which is underlaid by at least one pool, and such term shall include the underground reservoir or reservoirs containing crude petroleum oil or natural gas or both. The words “field” and “pool” mean the same thing have the same meaning when only one underground reservoir is involved; however, the word “field,” unlike the word “pool,” may relate to two or more pools.

“(5) GAS. All natural gas, including casinghead gas, and all other hydrocarbons not defined as oil in subdivision (3) of this section.

“(11) ILLEGAL GAS. Gas which has been produced within the state of Alabama from any well or wells in excess of the amount allowed by any rule, regulation; or order of the board, as distinguished from gas produced within the state of Alabama not in excess of the amount so allowed, which is “legal gas.”

“(10) ILLEGAL OIL. Oil which has been produced within the state of Alabama from any well or wells in excess of the amount allowed by any rule, regulation; or order of the board, as distinguished from oil produced within the state of Alabama not in excess of the amount so allowed, which is “legal oil.”

“(8) ILLEGAL PRODUCT. Any product of oil or gas, any part of which was processed or derived in whole or in part from illegal oil or illegal gas or from any product thereof, as distinguished from “legal product,” which is a product processed or derived to no extent from illegal oil or illegal gas.

“(9) OIL. Crude petroleum oil and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of a condensation of gas after it leaves the pool.

“(10) OPERATOR. The person who is authorized by the board to operate an oil, gas or Class II injection well, or production facility, or processing facility, or engages in the transportation of hydrocarbons by pipeline, including the handling and disposal of wastes that may be generated during operation of a well, or production facility, or processing facility.
“(7) (11) OWNER. The person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or herself or for himself or herself and another or others.

“(2) (12) PERSONS. Any natural person, firm, corporation, association, partnership, joint venture, receiver, trustee, guardian, executor, administrator, fiduciary, representative of any kind or any other group acting as a unit.

“(5) (13) POOL. An underground reservoir containing a common accumulation of crude petroleum oil or natural gas or both and each zone of a general structure which is completely separated from any other zone in the structure.

“(8) (14) PRODUCER. The owner of a well or wells capable of producing oil or gas or both; provided, however, that the word “producer” as used in section 9-17-25 shall also include any person receiving money or other valuable consideration as royalty or rental for oil or gas produced or because of oil or gas produced, whether produced by him or her or by some other person on his or her behalf, either by lease, contract or otherwise, and whether the royalty consists of a portion of the oil or gas produced being run to his or her account or a payment in money or other valuable consideration.

“(9) (15) PRODUCT. Any commodity made from oil or gas and shall include refined crude oil, crude tops, topped crude, processed crude petroleum, residue from crude petroleum, cracking stock, uncracked fuel oil, fuel oil, treated crude oil, residuum, gas oil, casinghead gasoline, kerosene, benzine, wash oil, waste oil, blended gasoline, lubricating oil, blends or mixtures of oil with one or more liquid products or byproducts derived from oil or gas and blends or mixtures of two or more liquid products or byproducts derived from oil or gas, whether hereinabove enumerated or not.

(16) REASONABLE MARKET DEMAND. As to oil, the amount of oil reasonably needed for current consumption and use, together with a reasonable amount of oil for storage and working stock and, as to gas, the amount of gas of any type reasonably needed to supply the current consumption and use of such type of gas.

“(13) (17) TENDER. A permit or certificate of clearance, approved and issued or registered under the authority of the board, for the transportation of oil, gas or products.

“(9) (18) WASTE. In addition to its ordinary meaning, such term shall mean “physical waste” as that term is generally understood in the oil and gas industry. It shall include any of the following:

“a. The inefficient, excessive or improper use or dissipation of reservoir energy and the locating, spacing, drilling, equipping, operating or producing of any oil or gas well or wells in a manner which results or tends to result in reducing the quantity of oil or gas ultimately to be recovered from any pool in this state;

“b. The inefficient storing of oil and the locating, spacing, drilling, equipping, operating or producing of any oil or gas well or wells in a manner causing or tending to cause unnecessary or excessive surface loss or destruction of oil or gas;

“c. Abuse of the correlative rights and opportunities of each owner of oil and gas in a common reservoir due to nonuniform, disproportionate and unratable withdrawals causing undue drainage between tracts of land;

“d. Producing oil or gas in such manner as to cause unnecessary water channeling or coning;

“e. The operation of any oil well or wells with an inefficient gas-oil ratio;
“f. The drowning with water of any stratum or part thereof capable of producing oil or gas;
“g. Underground waste however caused and whether or not defined;
“h. The creation of unnecessary fire hazards;
“i. The escape into the open air, from a well producing both oil and gas, or gas in excess of the amount which is necessary in the efficient drilling or operation of the well;
“j. The use of gas, except sour gas, for the manufacture of carbon black;
“k. Permitting gas produced from a gas well to escape into the air; and
The escape of gas into the open air, from a well producing gas, in excess of the amount which is necessary for safety reasons or for the efficient drilling, testing, and operation of the well.
“l. Production of oil and gas in excess of reasonable market demand.

§ 9-17-6.
“(a) The board shall have jurisdiction and authority over all persons and property necessary to administer and enforce effectively the provisions of this article and all other articles relating to the conservation of oil and gas.
“(b) The board shall have the authority and it shall be its duty to make such inquiries as it may think proper to determine whether or not waste, over which it has jurisdiction, exists or is imminent. In the exercise of such power, the board shall have the authority to perform the following:
“(1) To collect data;
“(2) To make investigation and inspection;
“(3) To examine properties, leases, papers, books and records, including drilling records, and logs, and other geological and geophysical data.
“(4) To examine, check, test and gauge oil and gas wells, tanks, plants, processing facilities, structures, natural gas pipelines and gathering lines, and storage and transportation equipment and facilities, refineries and other modes of transportation;
“(5) To hold hearings to appoint a hearing officer for the purpose of conducting public hearings on behalf of the board and making recommendations to the board;
“(6) Appoint a hearing officer for the purpose of conducting public hearings on behalf of the board and making recommendations to the board.
“(6)(7) To require the keeping of records and making of reports; and
“(7)(8) To take such action as may be reasonably necessary to enforce this article.
“(c) The Board shall have the authority to make, after hearing and notice as provided in this article, such reasonable rules, regulations, and orders as may be necessary from time to time in the proper administration and enforcement of this article, including rules, regulations, and orders for the following purposes;
“(1) To require the drilling, casing, and plugging of wells to be done in such a manner as to prevent the escape of oil or gas out of one stratum to another;
“(2) To prevent the intrusion of water into an oil or gas stratum from a separate stratum;
“(3) To prevent the pollution of fresh water supplies by oil, gas, or salt water, or other contaminants resulting from oil and gas operations.
“(4) To require the making of reports showing the location of oil and gas wells and to require the filing of logs, including electrical logs, and drilling records and the lodging in the office of the state oil and supervisor of typical drill cuttings or cores, if cores are taken, within six months from the time of the completion of any well.

“(5) To require reasonable bond, with good and sufficient surety, or other financial security approved by the board, conditioned for the performance of the duties outlined in subdivisions (1), (2), (3), and (4) of this subsection, including the duty to plug each dry or abandoned well and to restore the well site for each dry or abandoned well and associated production and processing facility and plant upon the abandonment of such well, facility, or plant.

“(6) To prevent wells from being drilled, operated, or produced in such a manner as to cause injury to neighboring leases or property.

“(7) To prevent the drowning by water of any stratum or part thereof capable of producing oil or gas in paying quantities and to prevent the premature and irregular encroachment of water which reduces or tends to reduce the total ultimate recovery of oil or gas from any pool.

“(8) To require the operation of wells with efficient gas-oil ratios and to fix such ratios.

“(9) To prevent “blowouts,” “caving” and “seepage” in the sense that conditions indicated by such terms are generally understood in the oil and gas business.

“(10) To prevent fires.

“(11) To identify the ownership of all oil and gas wells, producing leases, refineries, tanks, plants, processing facilities, structures, natural gas pipelines and gathering lines, and storage and transportation equipment and facilities.

“(12) To regulate the “shooting” perforating and chemical treatment of wells.

“(13) To regulate enhanced recovery methods, which include Class II injection wells as defined in the Federal Safe Drinking Water Act, 42 U.S.C. 300f et seq.

“(14) To regulate the spacing of wells and to establish drilling units.

“(15) To limit and prorate the production of oil or gas or both from any pool or field for the prevention of waste as defined in this article.

“(16) To require, either generally or in or from particular areas, certificates of clearance or tenders in connection with the transportation of oil, gas or any product.

“(17) To prevent, so far as is practical, reasonably avoidable drainage from each developed unit which is not equalized by counterdrainage.

“(18) To require the placing of meters of a type approved by the board wherever the board may designate in plants and processing facilities on all pipelines, gathering systems, barge terminals, loading racks, refineries or other places deemed necessary or proper to prevent waste and the transportation of illegally produced oil or gas. Such meters at all times shall be under the supervision and control of the board; and it shall be a violation of this article, subject to the penalties provided in this article, for any person to refuse to attach or install such meter when ordered to do so by the board or in any way to tamper with such meter so as to produce a false or inaccurate reading or to have any bypass at such a place where the oil or gas can be passed around such meter, unless expressly authorized by written permit of the board.
§ 9-17-12.

(a) Whether or not the total production from a pool is limited or prorated, no rule, regulation, or order of the board shall be such in terms or effect that it will do the following:

(1) That it shall be necessary at any time for the producer from or the owner of a tract of land in the pool, or an interest associated therewith or derived therefrom, in order that he or she may obtain such tract's just and equitable share of the interest of the production of such pool, as such share is set forth in this section, to drill and operate any well or wells on such tract in addition to such well or wells as can without waste produce such share; or

(2) As to occasion net drainage from a tract or any interest associated therewith or derived therefrom, unless there is drilled and operated upon such a well or wells in addition to such well or wells thereon as can without waste produce such tract's just and equitable share or the just and equitable share of such interest, as set forth in this section, of the production of such pool.

(b) For the prevention of waste, to protect and enforce the correlative rights of the owners and producers in a pool and to avoid the augmenting and accumulation of risks arising from the drilling of an excessive number of wells, the board shall, after a hearing, establish a drilling or production unit or units for each pool. A drilling or production unit as contemplated in this subsection, means the maximum area which may be efficiently and economically drained by one well, and such unit shall constitute a developed unit as long as a well is located thereon, which is capable of producing oil or gas in paying quantities, or until the board shall determine and order otherwise after notice and hearing. It is provided, however, that the board shall have no authority to fix a drilling or production unit in excess of either 160 acres or one governmental quarter section plus 10 percent tolerance for any pool deemed by the board to be an oil reservoir or in excess of either 640 acres or one governmental section plus 10 percent tolerance, for any pool, deemed by the board to be a gas reservoir, the said 10 percent tolerance provided for so as to allow for irregular sections; provided, however, that the board may, at its discretion, after notice and hearing, establish drilling or production units for oil and gas in excess of the aforesaid limitations when it is affirmatively demonstrated that one well can efficiently and economically drain the proposed area and that a larger unit is justified because of technical, economic, environmental or safety considerations, or other reasons deemed valid by the board. To insure protection of coequal and correlative rights, the board may, after notice and hearing, establish units for oil and gas pools by a quantum not to exceed 50 percent greater than the aforesaid limitation provided such action is justified by sufficient technical data, indicating that such acreage or land in excess of the aforesaid maximum limitations is being drained or is in imminent danger of being drained and that the owners of such excess acreage or lands that the persons owning any interest or combination of interests in such excess acreage or lands cannot otherwise receive their just and equitable share of production from the pool being so drained; provided, however, in the event such excess lands or interests are integrated or pooled by order of the board, then the provisions of Section 9-17-13 shall be applicable to such owners of tracts or interests in such acreage or land in excess of the aforesaid maximum limitations so that the operator of the drilling or production unit in which such tracts or interests are included shall have the right to charge against the interest of each other owner in the production from
the wells drilled by such the designated operator the actual expenditures required for such that purpose, not in excess of what are reasonable, including a reasonable charge for supervision; and the operator shall have the right to receive the first production from such the wells drilled by him thereon which otherwise would be delivered or paid to other parties jointly interested in the drilling of the well so that the amount due by each of them for his or her share of the expense of drilling, equipping, and operating the well may be paid to the operator of the well out of production, with value of production calculated at the market price in the field at the time such production is received by the operator or placed to his or her credit.

“Notwithstanding the provisions of this section, all persons entitled to share in the production of oil or gas from a tract or interest or tracts or interests in land may voluntarily agree to the creation or establishment of a drilling or production unit, or may authorize one or more of the persons entitled to share in the such production to create or establish a drilling or production unit, containing as much or more acreage or land than drilling units established by the board for the same pool, but not in excess of 160 acres or one governmental quarter section, plus 10 percent tolerance, in the case of oil and 640 acres or one governmental section, plus 10 percent tolerance, in the case of gas; subject to the aforementioned qualifications in this section and up to 10-50 percent greater, as provide hereinabove; a drilling unit so created or established shall, subject to the approval of the board, be valid and binding for all purposes even though such the drilling or production unit contains more acreage or land than the board has included, or is authorized by this section to include in a drilling or production unit established by it for the same pool; provided, however, the spacing limitations set forth herein shall not apply to offshore wells shall be as is determined proper by the board.

“(c) Each well permitted to be drilled upon any drilling or production unit to a pool in a field with respect to which the board has promulgated special rules shall be drilled at a location on the unit authorized by such the exceptions as may be reasonably necessary, where it is shown, after notice and hearing, and the board finds, that the unit is partly outside the pool, or, for some reason, that a well located in accordance with applicable rules would be nonproductive, would not be at the optimum position in such the drilling or production unit for the most efficient and economic drainage of the unit, or where topographical conditions are such as to make the drilling at an authorized location on the unit unduly burdensome or where an exception is necessary to prevent the confiscation of property. Whenever an exception is granted, the board shall take such action as will offset any advantage which the person securing the exception may have over other producers by reason of the drilling of the well as an exception, and so that drainage from developed units to the tract with respect to which the exception is granted will be prevented or minimized and the producer of the well drilled as an exception will be allowed to produce no more than his or her just and equitable share of the oil and gas in the pool, as such share is set forth in this section.

“(d) Subject to the reasonable requirements for prevention of waste and to the reasonable adjustment because of structural position, a producer’s just and equitable share of the oil and gas in the pool (also sometimes referred to as a tract’s just and equitable share) is that part of the authorized production for the pool (whether it be the total which could be produced without any restriction on the amount of production or whether it
be an amount less than that which pool could produce if no restriction on amount were imposed) which is substantially in the proportion that the quantity of recoverable oil and gas in the developed area of his or her tract or interest of tracts or interests in the pool bear or bears to the recoverable oil and gas in the total developed area of the pool, insofar as these amounts can be practically ascertained; and to that end, the rules, regulations, permits, and orders of the board shall be such as will prevent or minimize reasonably avoidable net drainage from each developed unit (that is, drainage which is not equalized by counterdrainage), and will give to each producer the opportunity to use his or her just and equitable share of the reservoir energy. In determining each producer’s just and equitable share of the authorized production for the pool, the board is authorized to give due consideration to the productivity of the well or wells located theron, as determined by flow tests, bottom hole pressure tests, or any other practical method of testing wells and producing structures, and to consider such other factors and geological or engineering tests and data as may be determined by the supervisor to be pertinent or relevant to ascertaining each producer’s just and equitable share of the production and reservoir energy of the field or pool.

“§ 9-17-13.

“(a) When any mineral or other related interests deriving from two or more separately owned tracts of land are embraced within an established or a proposed drilling or production unit, or when there are separately owned interests in all or part of an established or proposed drilling or production unit, or any combination of such, the persons owning such interests therein may validly agree to integrate or pool such interests and to develop such interests and associated lands as a drilling or production unit. Where, however, such the owners have not agreed to so integrate or pool such interests, the board shall, for the prevention of waste or to avoid the drilling of unnecessary wells, require such the persons owning such interests to do so and to develop their interests and the associated lands as a drilling or production unit.

“(b) The board, in order to prevent waste and avoid the drilling of unnecessary wells, may permit or require the cycling of gas in any pool or portion thereof and is also authorized to permit or require the introduction of gas or other substance into an oil or gas reservoir, maintaining pressure or carrying on secondary enhanced recovery operations. The board may require pooling or integration of all the interests in or associated with such the tracts, when reasonably necessary in connection with cycling operations.

“(c) All orders requiring integration, pooling, cycling, representing, pressure maintenance or secondary enhanced recovery operations shall be made after notice and bearing and shall be upon terms and conditions that are just and reasonable and which will afford to the person owning each such interest associated with each tract the opportunity to recover or receive his or her just and equitable share of the oil and gas in the pool without unnecessary expense and will prevent or minimize reasonably avoidable drainage from each developed unit which is not equalized by counterdrainage. The portion of the production allocated to each tract or interest included in an integrated or pooled unit formed by an integration or pooling order shall, when produced, be considered as if it had been produced from such the tract or interest by a well drilled thereon; and any operations conducted within or with respect to such the pooled or integrated unit pursuant to the pooling or
integration order shall be deemed for all purposes to be conduct of operations for the production of oil or gas or both form each tract or interest within said the unit. All orders requiring pooling or integration shall, among other things, provide all of the following:

“(1) That the actual and reasonable costs of developing and operating the pooled integrated unit (including a reasonable charge for supervision) and, if applicable, a risk compensation fee (as hereinafter provided) shall be charged to the separately owned tracts or interests share in production form the unit;

“(2) That such costs and fee (if any) chargeable to a tract or interest shall be paid by the person or persons not entitled to share in production free of development and operating costs and who, in the absence of the pooling or integration order, would be responsible for the expense of developing and operating such the tract or interest and that such person’s or persons’ interest in the separately owned tract or interest shall be primarily responsible therefor;

“(3) That, if any nonconsenting owner shall fail or refuse to pay the costs and/or fee (if any) chargeable to his or her tract or interest, such the costs and/or fee shall be recoverable solely out of the production allocable to such the tract or interest, provided, however, that this limitation shall not apply to a nonconsenting owner who has furnished the operator with a notarized statement agreeing to pay his or her proportionate share of the drilling and completion costs for a unit well as hereinafter provided;

“(4) That, when the full amount of any charge made against separately owned tract or interest is not paid when due by the person or persons primarily responsible therefor, as provided above, then 13/16ths (or if said tract or interest is leased, the working interest fraction or percent if it is greater) of the oil and gas production allocated to such the separately owned tract or interest may be appropriated by the operator and marketed and sold for the payment of such the charge, but that a 3/16ths part (or the actual landowner royalty if it is less) of the unit production allocated to each separately owned tract or interest shall in all events be regarded as royalty for the payment of such the costs and fees; and

“(5) That any person owning any overriding royalty, oil and gas payment, royalty in excess of 3/16ths of production, or other interests, who is not primarily responsible for payment of the development and operating costs or risk compensation fee (if any), shall, to the extent of any payment or deduction therefrom from his or her share, be subrogated to all rights of the operator with respect to the interest or interests primarily responsible for such the payment.

Additionally, if the operator, or the operator together with the consenting owners, shall own a majority in interest of the drilling and operating rights in the integrated or pooled unit, and the operator has made a good faith effort to (i) notify each nonconsenting owner of record of the names of all owners interest voluntarily integrated or pooled into the unit, (ii) notify each nonconsenting owner of record of the names of all owners of drilling rights who have agreed to integrate or pool any interests in the unit, (iii) ascertain the address of each
nonconsenting owner, (iv) give each nonconsenting owner written notice of the proposed operation, specifying the work to be performed, the proposed location, proposed depth, objective formation and the estimated cost of the proposed operation, and (v) to offer each nonconsenting owner the opportunity to lease or farm out on reasonable terms or participate in the cost and risk of developing and operating the unit well involved on reasonable terms, then the pooling or integration order shall, if the operator so requests, also provide that, if any nonconsenting owner (a) does not pay his or her proportionate share of the drilling and completion costs for any unit well within 30 days after commencement of actual drilling operations or prior to reaching total depth, whichever is earlier, or at such other time as may be contracted between the parties, or, alternatively, (b) does not, on or before commencement of actual drilling operations, provide the operator with a notarized statement agreeing to pay such the costs, the there shall be charged to the tract or interest of such the nonconsenting owner a risk compensation fee equal to 150 percent of such the tract’s or interest’s share of the actual and reasonable costs of drilling, reworking (prior to initial commercial production), testing, plugging back, deepening (but not below that depth specified in the permit for the well), and completing (through the wellhead) said well; provided, however, that no risk compensation fee shall be chargeable against the tract or interest in the unit prior to the time notice was given unless, at the pooling or integration hearing, it is shown, by a United States mail certified mail return receipt card or by other evidence deemed sufficient by the board, that such the nonconsenting owner was given actual notice of said the pooling or integration hearing and unless it is also shown that the notice given to such the owner specifically stated that the operator was requesting that the board impose a risk compensation fee in accordance with the provisions of this section. In the event that a nonconsenting owner who has provided the operator with a notarized statement agreeing to pay his or her proportionate share of the drilling and completion costs for a unit well does not fully pay such the costs within 30 days after commencement of actual drilling operation or prior to reaching total depth, whichever is earlier, or on or before such other time as may be contracted between the parties, then any unpaid balance of such the costs shall bear interest at the rate of one and one-half percent per month, and such the nonconsenting owner shall be personally liable for such the unpaid balance together with interest thereon and also for any attorney’s fees, court costs, or other expenses incurred by the operator in attempting to collect such the unpaid balance and interest thereon; and, additionally, the operator shall have the right, if the well is a producer, to appropriate, market, and sell such the nonconsenting owner’s share of production for the payment of the amounts due by such that owner. The value of any production appropriated by the operator under the authority of any integration or pooling order shall be calculated at the market price in the field (after deduction for taxes and for cleansing, transportation, compression, and processing costs) at the time such production is received by the operator or placed to his or her credit. Unless the pooling or integration order (or an amendment thereto) shall specify otherwise or unless the affected parties shall agree otherwise, production from any pooled or integrated unit formed by a pooling or integration order shall be allocated to each separately owned tract or interest in the unit in the proportion that the acreage of each such tract or interest bears to the total acreage of the unit; and under such the circumstances allocation of production on this basis shall be considered as a just and reasonable allocation which will afford to each person owning each tract or interest within
such the unit the opportunity to recover or receive his or her just and equitable share of the oil and gas produced from the unit. Nothing herein or in any order issued pursuant hereto shall be construed to subject any nonconsenting owner who is subject to a risk compensation fee, as hereinabove provided, to any personal liability for any damages caused by or resulting from any negligent act or other tort committed by the operator or by any consenting owner in the course of developing and operating a pooled or integrated unit; nor shall anything herein or in any order issued pursuant hereto prevent the operator and any other owner or owners in the unit from entering into any agreement that contains provisions respecting the pooling, integration, or development of their tracts or interests in the pooled or integrated unit that differ from the above provisions or form the provisions contained in any pooling or integration order. As used herein, the term “operator” shall mean the person designated by the board to be in charge of developing and operating a drilling or production unit; the term “nonconsenting owner” shall mean an owner who owns a tract or interest in a drilling or production unit and who has not, on or before the date a pooling or integration order is entered with respect to such unit, reached an agreement with the operator relative to terms and conditions which will govern the manner in which his or her said tract or interest shall be developed and operated; the term “consenting owner” shall mean an owner who has so reached such an agreement with the operator; the term “owner” shall mean a person who, if a pooling or integration order had not been entered, would be an owner as that term is defined elsewhere in this article; the terms “costs of developing” and costs of drilling, equipping, reworking, testing, plugging back, deepening, and completing the initial unit well and any subsequent unit well but shall not include any costs incurred in connection with the acquisition of any oil and gas leases covering tracts or interests in the unit; and the term “actual and reasonable costs” means actual expenditures not in excess of what are reasonable.

“Subsection (c) shall apply only to unitization of interests within a drilling unit and shall not apply to fieldwide or poolwide units, which are authorized and governed under the provisions of Article 3 of this chapter.

“(d) Should the owners of separate tracts or interests embraced within a drilling or production unit fail to agree upon the integration or pooling of the tracts or interests associated with such the tracts and the drilling of a well on such that unit, and should it be established that the board is without authority to required integration or pooling as provided for in this section, then subject to all other applicable provisions of this article, the owner of the interests or interests associated with each tract embraced within such the drilling or production unit may drill on his or her tract; but the allowable production from such that tract or interest shall be such proportion of the allowable production for the full drilling or production unit as the area of such the separately owned tract associated with the separately owned interest bears to the full drilling or production unit.

“(e) Agreements made in the interest of conservation of oil or gas, or both, or for the prevention of waste, between and among owners or operators, or both, owning separate interests in the same oil or gas pool, or in any area that appears from geological or other data to be underlain by a common accumulation of oil or gas, or both, and agreements between and among such the owners or operators, or both, and royalty owners therein of the pool or area or any part thereof as a unit for establishing and carrying out a plan for the cooperative development and operation thereof, when such the agreements are approved
by the board, are hereby authorized and shall not be held or construed to violate any of the statutes of this state relating to trusts, monopolies; or contracts and combinations in restraint of trade.

“§ 9-17-24.
“(a) Any person desiring or proposing to drill any well in search of oil or gas or any person proposing to drill a Class II injection well as defined in the Federal Safe Drinking Water Act, 42 U.S.C. 300f et seq., before commencing the drilling of any such well, shall notify the state oil and gas supervisor upon such the form as the state oil and gas supervisor may prescribe and shall pay to the State Treasurer a fee of $300.00 three hundred dollars ($300) for each such well. The drilling of any well is hereby prohibited until such notice is given and such the fee has been paid as herein provided. The state oil and gas supervisor shall have the power and authority to prescribe that the said form indicate the exact location of such the well, the name and address of the owner, operator, contractor, driller, and any other person responsible for the conduct of drilling operations, the proposed depth of the well, the elevation of the well above sea level and such other relevant information as the state oil and gas supervisor may deem necessary or convenient to effectuate the purposes of this article.

“(b) Any person filing a petition or notice of such petition with the State Oil and Gas Board requesting a public hearing before the State Oil and Gas Board shall pay to the State Treasurer a fee of $150.00 one hundred fifty dollars ($150) for filing such the petition. Any person who desires to file a petition with the board in forma pauperis shall file with the board a motion for leave so to proceed together with an affidavit, showing his or her inability to pay the filing fee therefor and his or her belief that he she is entitled to redress before the board. If the motion is granted, the person may proceed without payment of the filing fee. If the motion is denied, the board shall state in writing the reasons for the denial.

“(c) Any person filing an application with the State Oil and Gas Board requesting a well status determination by the board under the Natural Gas Policy Act of 1978 (NGPA), 15 U.S.C. 3413, shall file the prescribed forms and shall pay to the State Treasurer a fee of $150.00 for making such application and determination.

“(d) All well permit fees, filing fees for petitions, application fees for NGPA determinations and other fees paid to the State Treasurer pursuant to the provisions of this section shall be paid into the Alabama State Oil and Gas Board Special Fund and disbursed by the State Treasurer upon warrants drawn by the State Comptroller for the purpose of defraying expenses incurred by the State Oil and Gas Board in the performance of its duties.

“(e) There is hereby created a separate fund in the State Treasury to be known as the Alabama State Oil and Gas Board Special Fund. This fund shall consist of well permit fees, filing fees for petitions, application fees for NGPA determinations and other fees. All moneys deposited in this fund shall be used for the purpose of defraying expenses incurred by the State Oil and Gas Board in the performance of its duties. Such fund shall be paid out only by warrant of the Comptroller upon the Treasurer, upon itemized vouchers, approved by the state oil and gas supervisor; provided, that no funds shall be withdrawn or expended except as budgeted and allotted according to the provisions of Sections 41-4-80 through 41-4-96 and Sections 41-19-12, and only in amounts as stipulated in the gen-
eral appropriation or other appropriation bills, provided further, that any funds unspent and unencumbered at the end of any state fiscal year shall be transferred into the General Fund.

“§ 9-17-80.
The phrase “secondary enhanced recovery methods” as used herein shall include, but shall not be limited to, the maintenance or partial maintenance of reservoir pressures by any method recognized by the industry and approved by the board, recycling, flooding a pool or pools or parts thereof with air, gas, water, liquid hydrocarbons or any other substance or any combinations thereof mean the increased recovery from a pool of oil and gas achieved by artificial means or by the application of energy extrinsic to the pool, including repressuring, cycling, pressure maintenance, injection, or any other secondary method enhanced recovery methods of producing hydrocarbons recognized by the oil and gas industry and approved by the board.

“§ 9-17-81.
In order to promote the conservation of oil and gas resources, prevent waste, avoid the drilling of unnecessary wells, allow the drilling of wells at optimum geologic locations, and protect correlative rights. The state oil and gas board shall hold a hearing to consider the need for the operation as a unit of an entire field or of any pool or pools or of any portion of a pool or portions or combinations thereof within a field for the production of oil or gas or both in order to increase the ultimate recovery thereof by secondary enhanced recovery methods, to prevent waste or to avoid the drilling of unnecessary wells or any method of cooperative development and operation calculated to increase the ultimate recovery of oil or gas.

“§ 9-17-82.
The board shall issue an order requiring such unit operation if it finds that:
“(1) Unit operation of the field or of any pool or pools or of any portion or portions of a pool or combinations thereof within the field is reasonably necessary to prevent waste, to increase the ultimate recovery of oil or gas, to avoid the drilling of unnecessary wells, to allow the drilling of wells at optimum geologic locations, and to protect the correlative rights of interested parties; and
“(2) The proposed plan for unit operation will increase the ultimate recovery of oil or gas by enhanced recovery methods or any other method of cooperative development and operation calculated to increase the ultimate recovery of oil or gas.

“§ 9-17-84.
An order requiring unit operation shall not become effective unless and until agreements incorporating the provisions of section 9-17-83 have been signed or in writing ratified or approved by the owners of at least 75 66 2/3 percent in interest as costs are shared under the terms of the allocation formula established by the board in the order pursuant to Section 9-17-83 (3) and by 75 66 2/3 percent in interest of the royalty and
overriding royalty owners in the unit area as revenues are distributed under the terms of the allocation formula established by the board in the order pursuant to Section 9-17-83 (3), and the board has made a finding to that effect either in the order or in a supplemental order. In the event the required percentage interests have not signed, ratified, or approved the order or said agreements within six months from and after the date of such the order it shall be automatically revoked.

"§ 9-17-85.

"(a) The board, by entry of new or amending orders, may form time to time add to unit operations portions of pools not theretofore included and may add to unit operations new pools or portions thereof and may extend the unit area as required. Any such order, in providing for allocation of production from the unit pool of the unit area, shall first allocate to such the pool or pools or portion thereof so added a portion of the total production of oil or gas or both from all pools affected within the unit area as enlarged, (and not required in the conduct of unit operations or unavoidably lost), such the allocation to be based on the relative contribution which such added pool or pools or portion thereof is expected to make during the remaining course of unit operations to the total production of oil or gas or both so allocated. The production so allocated to such the added pool or pools or portions thereof shall be allocated to the separately owned tracts which participate in such the production on the basis of the relative contribution of each such tract as provided in subdivision (3) of section 9-17-83. The remaining portion of unit production shall be allocated among the separately owned tracts within the previously established unit area in the same proportions as those specified in the previous order. Orders promulgated under this paragraph shall become operative at 7:00 A.M. on the first day of the month next following the day on which the order becomes effective under the provisions of subsection (b) of this section.

"(b) An order promulgated by the board under subsection (a) of this section shall not become effective unless and until the following occur:

"(1) All of the terms and provisions of the unitization agreement relating to the extension or enlargement of the unit area or to the addition of pools or portions thereof to unit operations have been fulfilled and satisfied and evidence thereof has been submitted to the board; and

"(2) The extension or addition effected by such the order has been agreed to in writing by the owners of at least 75 66 2/3 percent in interest as costs are shared under the terms of the allocation formula established by the board of in the area or pools or portions thereof to be added to the unit operation by such the order and by 75 66 2/3 percent in interest of the royalty and overriding royalty owners as revenues are distributed under the terms of the allocation formula established by the board in the area or pools or portions thereof to be added to the unit operations by such order, and evidence thereof has been submitted to the board.

"In the event both of the above requirements are not fulfilled within six months from and after the date of such order, it shall be automatically revoked.

"(c) After the operative date of an order promulgated under this section, costs and expenses of operation of the unit as enlarged shall be governed by subdivision (5) of section 9-17-83. Adjustment among the owners of the unit area as enlarged (not including
royalty owners) of their respective investments in wells, tanks, pumps, machinery, materials, equipment and other things and services of value attributable to the operation of the unit as enlarged shall be governed by subdivision (4) of section 9-17-83.”

Section 2. This act shall become effective on the first day of the third month following its passage and approval by the Governor, or its otherwise becoming law.
Appendix G
LOUISIANA STATUTE 30:5

§ 5. Permission to Convert Gas into Carbon Black; Recycling Gas; Unit Operations.

A. In order to prevent waste of natural gas, the commissioner may grant to bona fide applicants permits for the building and operation of plants and to burn natural gas into carbon black for the period of time fixed by the commissioner in the permit, not to exceed twenty-five years and subject to the provisions of the laws of the state and the rules and regulations of the department. It shall be a violation of this chapter for any person to build or operate a new plant, for these purposes without the permit required by this section.

B. In order to prevent waste and to avoid the drilling of unnecessary wells, the commissioner shall, after notice and upon hearing, and his determination of feasibility, require the re-cycling of gas in any pool or portion of a pool productive of gas from which condensate or distillate may be separated or natural gasoline extracted, and promulgate rules to unitize separate ownership and to regulate production of the gas and reintroduction of the gas into productive formations after separation of condensate or distillate, or extraction of natural gasoline, from the gas.

C. (1) Without any way modifying the authority granted to the assistant secretary of the Office of Conservation in R.S. 30-9 (8) to establish a drilling unit or units for a pool and in addition to the authority conferred in Subsection 8 of this section:

(a) The assistant secretary of the Office of Conservation upon the application of any interested party, also is authorized and empowered to enter an order requiring the unit operation of any pool or combination of two pools in the same field, productive of oil or gas, or both, in connection with the institution and operation of systems of pressure maintenance by the injection of gas, water, or any other extraneous substance, or in connection with any program of secondary or tertiary recovery; and

(b) The assistant secretary of the Office of Conservation is further authorized and empowered to require the unit operation of a single pool in any situation where the ultimate recovery can be increased and waste and the drilling of unnecessary wells can be prevented by such of unit operation.

(2) In connection with such an order of unit operation, the assistant secretary of the Office of Conservation shall have the right to unitize, pool, and consoli-
date all separately owned tracts and other property ownership. Any order for such a unit operation shall be issued only after notice and hearing and shall be based on findings that:

(a) The order is reasonably necessary for the prevention of waste and the drilling of unnecessary wells, and will appreciably increase the ultimate recovery of oil or gas from the affected pool or combination of two pools.

(b) The proposed unit operation is economically feasible,

(c) The order will provide for the allocation of each separate tract within the unit of a proportionate share of the unit production, which shall insure the recovery by the owners of that tract of their just and equitable share of the recoverable oil or gas in the unitized pool or combination of two pools, and

(d) At least three-fourths of the owners and three-fourths of the royalty owners, as to a particular interest, as hereinafter defined, such three-fourths to be in interest as determined under (c) hereof, shall have approved the plan and terms of unit operation, such approval to be evidenced by a written contract or contracts covering the terms and operation of the unitization signed and executed by the three-fourths in interest of the owners and three-fourths in interest of the said royalty owners and filed with the assistant secretary of the Office of Conservation on or before the day set for the hearing.

(3) The order requiring the unit operation shall designate a unit operator and shall also make provision for the proportionate allocation to the owners (lessees or owners of unleased interests) of the costs and expenses of the unit operation, which allocation shall be in the same proportion that the separately owned tracts share in unit production. The cost of capital investment in wells and physical equipment and intangible drilling costs, in the absence of voluntary agreement among the owners to the contrary shall be shared in like proportion; however, no such owner who has nor consented to the unitization shall be required to contribute to the costs or expenses of the wells and physical equipment and intangible drilling costs except out of the proceeds of production accruing to the interest of such owner out of production from such unit operation. However, no well cost credit allowable shall be adjusted on the basis of less than the average well costs within the unitized area. The order requiring unit operation shall not vary nor alter any of the terms of the above required written contract or contracts evidencing approval nor impose any terms or operations upon the non-signers of the contract or contracts more onerous than the terms and operations set out in the contract or contracts.
(4) Upon application and after notice and a public hearing and consideration of all available geological and engineering evidence, the assistant secretary of the Office of Conservation, to the extent required by such evidence, may revise any reservoir-wide unit or units heretofore created by the assistant secretary of the Office of Conservation.

(5) For the purpose of calculating the above required three-fourths in interest of royalty owners, the term “royalty owner” shall mean any interested party other than the owner of an unleased interest or a mineral lessee or the owner of any interest created out of the interest of a mineral lessee, such as a net operating interest, overriding royalty or production payment. Solely for the purpose of calculating the above required three-fourths in interest of owners and without expanding the definition of the term “owner” in R.S. 30:3(8), all interested parties owning interests entitling them to share in production from a proposed unit whose interest have been created out of that of a mineral lessee shall have their interests considered as if they were owners.

(6) No order of the commissioner entered pursuant hereto shall have the effect of enlarging, displacing, varying, altering, or in anywise whatsoever modifying or changing contracts; in existence on the effective date of this Act concerning the unitization of any pool (reservoir) or pools (reservoirs) or field (as defined in the contract) for the production of oil or gas or both.

D.

(1) In order to prevent waste and increase the ultimate recovery of oil or gas, or both, the assistant secretary of the Office of Conservation, upon the application of any interested owner, and only after notice and a public hearing, is authorized to approve a cyclic injection project for the operation of a well by the method of enhanced recovery known as cyclic injection, without the formation of a unit under Subsection C of this Section or under any other provisions of this chapter. No operator shall utilize cyclic injection without first securing the assistant secretary’s approval pursuant to this subsection. For the purpose of the subsection, “cyclic injection” is hereby defined as a single-well process in which a production well is injected with a substance for the purpose of enhanced recovery. After a shut-in period, the well is returned to production. This procedure may be performed repeatedly on one or more wells in a reservoir.

(2) Prior to approving any cyclic injection project the assistant secretary must find that the project will not drain any area of the reservoir different from that being drained by the project well prior to initiation of the project, and that the project will not otherwise adversely affect other owners having rights in the same reservoir in which the applicant proposed to conduct cyclic injection. If the assistant secretary does not make these findings required in the preceding sentence, he shall not approve the cyclic injection project, and it shall not
be conducted, unless:

(a) A unit encompassing the maximum area which may efficiently and economically be drained by one well utilizing cyclic injection is formed under other provisions of this chapter, or

(b) A unit encompassing the entire reservoir is formed under Subsection C of this section.

(3) The approval of a cyclic injection project shall not cause any change or alteration in the boundaries, tract participations or other aspects of any unit previously formed under this chapter except to the extent the unit is superseded by a unit formed under Subsection C of this section.

(4) No cyclic injection project approved under this subsection shall qualify for exemption from severance tax under R.S. 47:633.4, unless:

(a) A unit is formed under Subsection C of the section and

(b) The project employs one of the techniques enumerated in and otherwise qualified under R.S. 47:633.4.

(5) Notwithstanding any other provision of law to the contrary, an owner, producer, or operator in the Caddo Pine Island Field in Caddo Parish shall be authorized to dispose or reinject produced saltwaters into the productive interval of the Nacotoch Formation without unitization of the entire reservoir; however, the consent of the other owners, producers, or operators, operating within a one-fourth mile radius of such wells, shall be obtained prior to the commencement of the disposal or injection of such saltwaters.

Appendix H
OIL AND GAS WELLS – DEEP POOL UNITS – APPLICATION; PROCEDURES; ALLOCATION OF COSTS; RULES AND REGULATIONS

Act. No. 1094

H. B. No. 1224

BY REPRESENTATIVE DANIEL

AN ACT to enact R.S. 30:5.1, relative to unitization of oil and gas wells; to provide for deep pool units; to provide procedures, terms, and conditions; to provide for rules and regulations; to provide for certain orders of the commissioner of conservation; and to provide for related matters.

Be it enacted by the Legislature of Louisiana:

Section 1. R.S. 30:5.1 is hereby enacted to read as follows:

§ 5.1. Deep pool order; application; procedure; allocation of costs; rules and regulations

A. In order to prevent waste and to avoid the drilling of unnecessary wells, and to encourage the development of deep oil and gas pools in Louisiana, the commissioner of conservation is authorized, as provided in this section, to establish a single unit to be served by one or more wells for a deep pool and to adopt a development plan for such deep unit.

B. Without in any way modifying the authority granted to the commissioner in R.S. 30:9(B) to establish a drilling unit or units for a pool and in addition to the authority conferred in R.S. 30:5, the commissioner upon the application of any interested party is authorized and empowered to enter an order requiring the unit operation of any deep pool where such unit operation will promote the development of such deep pools, prevent waste, and avoid the drilling of unnecessary wells.

C. In connection with such order, the commissioner shall have the right to establish a unit for a deep pool and to unitize, force pool, and consolidate all separately owned tracts and other property ownerships within such unit. Any order creating a unit for a deep pool shall be issued only after notice and public hearing and shall be based on findings that:

(1) The order is reasonably necessary to promote the development of a deep pool and for the prevention of waste and the drilling of unnecessary wells;
(2) The proposed unit operation is economically feasible;

(3) The geologic top of the deep pool was encountered in the initial well for the pool at a depth in excess of fifteen thousand feet true vertical depth;

(4) Sufficient evidence exists to reasonably establish the limits of the deep pool; and

(5) The plan of development for the unit is reasonable. The plan shall be revised only if approved by the commissioner after notice and public hearing.

D. The order shall provide for the initial allocation of unit production on a surface acreage basis to each separately owned tract within the unit.

E. No order shall be issued by the commissioner unless interested parties have been provided a reasonable opportunity to review and evaluate all data submitted by the applicant to the commissioner to establish the limits of the deep pool, including seismic data.

F. The order creating the unit shall designate a unit operator and shall also make provision for the proportionate allocation to the owners (lessees or owners of unleased interests) of the costs and expenses of the unit operation, which allocation shall be in the same proportion that the separately owned tracts share in unit production. The cost of capital investment in wells and physical equipment and intangible drilling costs, in the absence of voluntary agreement among the owners to the contrary, shall be shared in like proportion. However, no such owner who has not consented to the unitization shall be required to contribute to the costs or expenses of the unit operation or to the cost of capital investment in wells and physical equipment and intangible drilling costs except out of the proceeds of production accruing to the interest of such owner out of production from such unit operation. In the event of a dispute relative to the calculation of unit well costs or depreciated unit well costs, the commissioner shall determine the proper costs after notice to all interested owners and public hearing thereon.

G. Upon application and after notice and public hearing and consideration of all new available geological and engineering evidence, the commissioner, to the extent required by such evidence, may create, revise, or dissolve any unit provided for under this section or modify any provision of any order issued hereunder. Any such order shall provide for the allocation of unit production on a just and equitable basis to each separately owned tract within the unit.
H. The commissioner shall prescribe; issue, amend, and rescind such orders, rules, and regulations, as he may find necessary or appropriate to carry out the provisions of this section.

I. While this section authorizes the initial creation of a single unit to be served by one or more wells, nothing herein shall be construed as limiting the authority of the commissioner to approve the drilling of alternate unit wells on drilling units established pursuant to R.S. 30:9(B).

Approved July 9, 1999
Efforts to pass a compulsory fieldwide unitization law were made in at least three biennial sessions of the Mississippi legislature before it was enacted in 1964. Opposition came from a relatively small, focused and effective group.

A bill for compulsory fieldwide unitization was defeated in 1960 by an emotional battle cry from the opponents that the proposed legislation would “deprive twenty-five percent of the people of their property against their will.” The twenty-five percent figure was based on a provision that required approval by seventy-five per cent of the working interest and royalty owners. This was during the first year of the term of a new governor who had run on a platform of industrial development. The same 1960 Legislature, which defeated the fieldwide unitization bill because it would take the property of twenty-five percent of the people against their will, adopted a bill, now § 57-5-21, Miss. Code Ann. (1972), which reads:

The several municipalities of this state, including counties, supervisors districts, cities, towns or villages, or combinations thereof contiguous to and lying in the same or adjacent counties, all hereinafter referred to as “municipalities,” shall have all the rights, powers and duties as contained in sections 57-5-1 to 57-5-19, plus the right of eminent domain in the acquisition of up to twenty-five per cent (25%) of the land for a “standard” industrial park if and when the owner or owners of at least seventy-five per cent (75%) of the acreage involved have either sold such acreage to the municipality or placed such acreage under option to said municipality.

The inconsistency apparently never occurred to the Legislature. It is necessary to try again and again in Mississippi in order to adopt oil and gas conservation legislation. Conservation Of Oil And Gas, published in 1948 by the Mineral Law Section of the American Bar Association, states that unsuccessful attempts were made in the 1940, 1942, 1944 and 1946 in Mississippi to enact a comprehensive oil and gas conservation law before a statute was adopted in 1948.

The 1964 Regular Session of the Mississippi Legislature adopted House Bill No.
456, now codified as §§ 53-3-102 to 53-3-119 Miss. Code Ann. (1972), which provided for compulsory fieldwide unitization. As the bill was about to be passed, supporters were aware that, as a result of a particular amendment, the statute would be unworkable. Consideration was given to killing the bill. Apparently because of the number of past failures, the supporters allowed the bill to become law with the hope it be amended and made workable later. The form of the bill as originally introduced was the model form fieldwide unitization statute developed by the Interstate Oil Compact Commission. The provision added during the legislative process, which rendered the statute unworkable provided:

(f) That the entire “unit area” has been completely and fully drilled out and developed by the drilling of one (1) oil well on every fourth (40) acres within the boundaries of the unit area, if an oil field, or one (1) gas well on every three hundred and twenty (320) acres within the unit area, if a gas field, which units for oil wells shall not exceed forty (40) contiguous surface acres, to be in the shape or form of a governmental quarter quarter section where possible, and which units for gas wells shall not exceed three and twenty (320) contiguous surface acres, to be in the shape or form of a governmental half section where possible.

It is not surprising that no compulsory fieldwide units were formed under this statute from the time of its adoption in 1964 until it was amended in 1972. In the 1972 the above provision was deleted and in lieu thereof there was added the following provision:

The operators of such unit shall have drilled a sufficient number of wells to a sufficient depth and at such locations as may be necessary for the board to approve the boundaries of the unit and determine that the field, pool or pools have been reasonably developed according to a spacing pattern approved by the board. No field unitization shall be approved by the board until each drilling unit of the field has been drilled; however, the board is hereby authorized to waive the requirement that each and every drilling unit be drilled upon a finding of fact that it is not economically feasible for a specific drilling unit to be drilled.

A reading of the above provision indicates it is classic legislative compromise and ambiguity when considered in relation to the provision it replaced. Notice one sentence giveth, one sentence taketh away and the final sentence giveth back about one-half. Nevertheless, while this might have seemed to the legislature a relatively small concession, it was sufficient to give to the State Oil and Gas Board leeway to approve compulsory fieldwide units based on oil field regulatory and industry standards and practices.

A statutory Pugh Clause was included in the original bill, which the supporters of the bill had to accept to get the bill approved. The Pugh Clause reads:

Section 6. The portion of unit production allocated to a separately owned tract within the unit area shall be deemed, for all purposes, to have been actually produced from such tract, and operations with respect to any tract within the unit
area shall be deemed for all purposes to be the conduct of operations for production of oil or gas, both, from each separately owned tract in the unit area. Provided, however, when an oil, gas and mineral lease contains lands partially within and partially without said unit area, the unit agreement shall have no force and effect on lands lying outside of such unit area and failure of the lessee or lessees thereof to drill and develop such lands lying outside said unit area within ninety (90) days from the date of the determination of the unit area by the State Oil and Gas Board shall render such lease or leases on lands lying outside said unit area void and of no force and effect.

This provision was amended in 1972 to provide for a one-year period during which there could be development outside the unit area.

In 1988 the required per cent of working interest and royalty owner approval was reduced from eighty-five percent to seventy-five percent.

The legislation, which established the Mississippi’s first comprehensive oil and gas conservation statute and created the present State Oil and Gas Board was adopted in 1948. This predated the compulsory fieldwide unitization statute of 1964 by sixteen years. The 1948 statute, which was based on the IOCC model form act, contained a provision contemplating and authorizing voluntary fieldwide units. The provision reads:

(d) The board in order to prevent waste and avoid the drilling of unnecessary wells may permit (1) the cycling of gas in any pool or portion thereof or (2) the introduction of gas or other substance not an oil or gas reservoir for the propose of repressuring such reservoir, maintaining pressure or carry on secondary recovery operations. The board shall permit the pooling or integration of separate tracts when reasonably necessary in connection with such operations.

(e) Agreements made in the interest of conservation of oil or gas or both, or for the prevention of waste, between and among owners or operators, both, owning separate holdings in the same field or pool, or in any area that appears from geologic or other data to be underlaid by a common accumulation of oil or gas, or both, and agreements between and among such owners or operators, or both, and royalty owners therein for the purpose of bringing about the development and operation of the field, pool or area, or any part thereof, as a unit, and for establishing and carrying our a plan for the cooperation development and operation thereof, when such agreements are approved by the board, are hereby authorized and shall not be held or construed to violate any of the statutes of this state relating to trusts, monopolies, or contracts and combinations in restraint of trade.

In Palmer Exploration v. Dennis, 730 F. Supp 734 (D.C. MS 1989), the court discusses generally the history and correlation of Mississippi’s voluntary fieldwide unit statute.
and compulsory fieldwide unit statute and held the statutory Pugh Clause in the compulsory statute did not apply to a voluntary unit formed under the voluntary unit statute.

Although no compulsory fieldwide units were formed during the period from 1964 to 1972, some voluntary units were formed before and during this period. The Mississippi Oil and Gas Board has approved ninety fieldwide units. The overwhelming majority are compulsory units formed since the 1972 amendment to the compulsory fieldwide unit statute.

Both Mississippi’s comprehensive oil and gas statute adopted in 1948 and compulsory fieldwide unit statute adopted in 1964 were based on model form statutes prepared by the IOGCC. Both statutes have well served the best interests of Mississippi and the industry. One of the IOGCC’s most important contributions to oil and gas conservation and regulation is the promulgation of model form statutes, rules and regulations.
§ 53-3-73. Permit fee

Any person, firm or corporation applying for a permit to construct a facility under sections 53-3-71 to 53-3-75 shall pay to the state oil and gas supervisor a fee of five hundred dollars ($500.00).


Historical and Statutory Notes

Derivation:

Library References

Key Number
Mines and Minerals 92.25 to 92.41.

Encyclopedias
WESTLAW Topic No.260.

§ 53-3-75. Operation restrictions

The right to construct, operate and maintain any facility as described in section 53-3-71 in, on, under or across land, which is submerged, or wherever the tide may ebb and flow shall be subject to the following:

(a) The paramount right of the United States to control commerce and navigation;
(b) The right of the public to make free use of the waters; and
(c) The restrictions and prohibitions contained in Section 81 of the Mississippi Constitution of 1890, as same may be amended.

Laws 1968. Ch. 262. § 3. eff. September 1, 1968.

Historical and Statutory Notes

Derivation:
Code 1942. § 6132-63.

Library References

Key Number
Mines and Minerals 92.25 to 92.41.

Encyclopedias
WESTLAW Topic No.260.

UNITIZATION OF OIL AND GAS FIELDS AND POOLS

Section
53-3-101. Applications of interested persons.
53-3-103. Order requiring unit operation.
53-3-105. Board order provisions.
53-3-107. Effective date of order.
§ 53-3-101. Applications of interested persons

The state oil and gas board upon the application of any interested person shall, after notice as herein provided, hold a hearing to consider the need for the operation as a unit of an entire field, or of an entire pool or pools, or of any portion or portions or combinations thereof, within a field, for the production of oil or gas or both, in order to increase the ultimate recovery thereof or to prevent waste. The board may reopen the hearing provided in this section at any time prior to the final order adjudicating that the requirements of section 1-107 have been satisfied.

Laws 1964. Ch. 236. § 1; Laws 1972. Ch. 365. § 1. eff. from and after passage (approved April 24, 1972).

Historical and Statutory Notes

Derivation:

Cross References
Applicability or Mississippi natural gas act chapter, see § 75-58-5.
Exemptions relating to privilege tax levy. See § 27-25-503.

Library References
Key Numbers          Encyclopedias

Notes of Decisions

1. Rules and regulations

Oil company presented substantial evidence to support State Oil and Gas Board’s promulgation of rule which allowed well in unitized drilling unit to produce twice daily allowable amount assigned to off-setting nonunitized well in adjacent individual drilling unit. Texas Pacific Oil Co., Inc. v. Petro Grande, Inc. (Miss. 1976) 328 So.2d 660. Mines and Minerals – 92.62

§ 53-3-103. Order requiring unit operation

The state oil and gas board may issue an order requiring such unit operation it finds that:
(a) Unit operation of the field or of any pool or pools, or of any portion or portions or combinations thereof within the field is reasonably necessary in order to effectively carry on secondary recovery, pressure maintenance, repressuring operations, cycling operations, water flooding operations, or any combination thereof, or any other form of joint effort calculated to substantially increase the ultimate recovery of oil or gas or both from the unit so formed or to prevent waste as defined in Section 53-1-3; and
(b) One or more method of unitized operation as applied to such common source of supply or portion thereof is feasible and will prevent waste or will with reasonable probability result in the recovery of substantially more oil or gas or both from the unit so formed than would otherwise be recovered; and
(c) The plan of unitization and the agreements effectuating same are fair and reasonable under all of the circumstances and protect the rights of all interested parties; and
(d) The correlative rights of interested parties will be protected; and
(e) The estimated additional cost incident to conducting such operation will not exceed the value of the estimated additional recovery of oil and gas and such cost of unit operation shall not be borne by the royalty owners.

The operators of such unit shall have drilled a sufficient number of wells to a sufficient depth and at such locations as may be necessary for the board to approve the boundaries of the unit and determine that the field, pool or pools have been reasonably developed according to a spacing pattern approved by the board. No field unitization shall be approved by the board until each drilling unit of the field has been drilled; however, the board is hereby authorized to waive the requirement that each and every drilling unit be drilled upon a finding of fact that it is not economically feasible for a specific drilling unit to be drilled.

Laws 1964, Ch. 236, § 2; Laws 1972, Ch. 365, § 2, eff. from and after passage (approved April 24, 1972).

Historical and Statutory Notes
Derivation:

Key Numbers
WESTLAW Topic No.260.

Library References
Encyclopedias

Notes of Decisions
In general 1
Constitutional rights 2

1. In general
Under statute requiring that no field unitization shall be approved by State Oil and Gas Board until each drilling unit of field has been drilled, dry hole was sufficient to meet statutory requirement that each drilling unit of field be drilled. Petro Grande, Inc. v. Texas Pac. Oil Co., Inc. (Miss. 1976) 338 So.2d 808. Mines and Minerals – 92.79.

State Oil and Gas Board did not err in finding that oil company had drilled sufficient number of wells to sufficient depth and at such location as was necessary for Board to approve boundaries on unit and determine that pool had been reasonable developed. Petro Grande, Inc. v. Texas Pac. Oil Co., Inc. (Miss. 1976) 338 So.2d 808. Mines and Minerals – 92.79.

1964 Fieldwide Unitization Act, as amended in 1972, did not change law that surface acreage content was basis of allocating daily allowable production of oil and gas between unitized drilling unit and individual nonunitized drilling unit sharing common source of oil and gas. Texas Pacific Oil Co., Inc. v. Petro Grande, Inc. (Miss. 1976) 328 So. 2d 660. Mines and Minerals – 92.50.

2. Constitutional rights

Use of surface acreage content as basis of allocating daily allowable production of oil and gas between unitized drilling unit and individual nonunitized drilling unit sharing common source of oil and gas did not deny individual unit’s owners equal protection of laws, since such allocation was intended to encourage participation by all drilling units sharing common source in secondary recovery operations and to prevent non-participating units from enjoying benefits of secondary recovery without sharing in costs. Texas Pacific Oil Co., Inc. v. Petro Grande, Inc. (Miss. 1976) 328 So. 2d 660. Constitutional Law – 2140(8).

§ 53-3-105. Board order provisions

The order issued by the State Oil and Gas Board shall be fair and reasonable under all of the circumstances and shall protect the rights of interested parties and shall include:

(a) A description of the geographical area and a description of the pool or pools, or of any portion or portions or combinations thereof affected which together constitute and are herein termed the “unit area.”

(b) A statement of the nature of the operations contemplated.

(c) A formula for the allocation among the separately owned tracts in the lit area of all the oil or gas, or both, produced and saved from the unit area, and not required in the conduct of such operation, which formula must expressly be found reasonably to permit persons otherwise entitled to share in or benefit by the production from such separately owned tracts to receive, in lieu thereof, their fair, equitable and reasonable share of the unit production or other benefits thereof. A separately owned tract’s fair, equitable and reasonable share of the unit production shall be that proportionate part of unit production that the contributing value of such tract for oil and gas purposes in the unit area and its contributing value to the unit bears to the total of all like values of all tracts in the unit, taking into account all pertinent engineering, geological and operating factors that are reasonably susceptible determination.
(d) A provision for adjustment among the owners of the unit area (not including royalty owners) of their respective investment in wells, tanks, pumps, machinery, materials, equipment and other things and services of value attributable to the unit operations. The amount to be charged unit operations for any such item shall be determined by the owners of the unit area (not including royalty owners), but if said owners of the unit area are unable to agree upon the amount of such charges, or to agree upon the correctness thereof, the board shall determine them after due notice and hearing thereon, upon the application of any interested party. The amount charged against the owner of a separately owned tract shall be considered expense of unit operation chargeable against such tract. The adjustments provided for herein may be treated separately and handled by agreements separate from the unitization agreement. The expense of dry holes drilled within the unit area prior to the effective date of an order of the board, as determined by Section 53-3-107, shall not be chargeable as investment under subsection (c) of Section 53-3-109, unless such dry hole is used in the unit operation, in which event its value to the unit shall be charged as investment.

(e) A provision that the costs and expenses of unit operation, including investment past and prospective, shall be borne by the owner or owners (not entitled to share in production free of operating costs and who in the absence of unit operation would be responsible for the expenses of developing and operating) of each tract in the same proportion that such tracts share in unit production. Each owner's interest in the unit area shall be responsible for his proportionate share thereof, and the unit operator shall have a lien thereon to secure payment of such share. When any owner fails to pay his part thereof when due and interest thereon at the legal rate, then all of such owner's interest in the unit production and equipment may be foreclosed in the same manner and under the same procedures provided for the foreclosure of mortgages in chancery court.

(f) A transfer or conversion of any owner's interest or any portion thereof, however accomplished after the effective date of the order creating the unit, shall not relieve the transferred interest or said operator's lien on said interest for the cost and expense of unit operations, past or prospective.

(g) The designation of, or a provision for the selection of a successor to the unit operator. The conduct of all unit operations by the unit operator, and the selection of a successor to the unit operator, shall be governed by the terms and provisions of the unitization agreements.

(h) The time the unit operation shall become effective and the manner in which, and the circumstances under which, the unit operation shall terminate.

(i) A requirement that all oil and/or gas contained in a unit area shall be produced and sold as rapidly as possible without decreasing the ultimate recovery of such oil and/or gas or causing damage to the reservoir.

Laws 1964. Ch. 236. § 3; Laws 1972. Ch. 365. § 3. eff. from and after passage (approved April 24, 1972).
Historical and Statutory Notes

Derivation:
Code 1942, § 6132-103.

Library References

Key Numbers
Mines and Minerals - 92.79, 92.80.
WESTLAW Topic No.260.

Encyclopedias

Notes of Decisions

In general 1
Constitution right 2

1. In general
1964 Fieldwide Unitization Act, as amended in 1972, did not change law that surface acreage content was basis of allocating daily allowable production of oil and gas between unitized drilling unit and individual nonunitized drilling unit sharing common source of oil and gas. Texas Pacific Oil Co., Inc. v. Petro Grande, Inc. (Miss. 1976) 328 So. 2d 660. Mines and Minerals – 92.50.


2. Constitutional rights
Use of surface acreage content as basis of allocating daily allowable production of oil and gas between unitized drilling unit and individual nonunitized drilling unit sharing common source of oil and gas did not deny individual unit’s owners equal protection of laws, since such allocation was intended to encourage participation by all drilling units sharing common source in secondary recovery operations and prevent non-participating units from enjoying benefits of secondary recovery without sharing in costs. Texas Pacific Oil Co., Inc. v. Petrol Grande, Inc. (Miss. 1976) 328 So.2d 660. Constitution Law 240(8).

§ 53-3-107. Effective date of order
An order requiring unit operations pursuant to Section 53-3-103, Mississippi Code of 1972, shall not be effective unless and until the plan of unitization and the agreements incorporating the provisions of Section 53-3-105 have been signed or, in writing, ratified, adopted or approved by the owners or lessees of least seventy-five percent (75%) interest on the basis of and in proportion to the surface acreage content of the unit area under the terms of the order and the agreement incorporating the provisions of Section 53-3-105 has been signed or, in writing, ratified, adopted or approved by at least seventy-five percent (75%) (exclusive of royalty interests owned by lessees or by subsidiaries or successors in title of any lessee) in interest of the royalty owners on the basis, and in proportion to the surface acreage content of the unit area and the board has made a finding to that effect, either in the order or in a supplemental order. In the event the required percentages have
not signed, ratified or approved the respective agreements within twelve (12) months from and after the date of such order, it shall be automatically revoked. Laws 1964, Ch. 236, § 4; Laws 1987, Ch. 379, § 1, eff. from and after passage (approved March 20, 1987).

Historical and Statutory Notes

Derivation:
Code 194:2. § 6132-104.

Library References

Key Numbers
Mines and Minerals - 92.79.

Encyclopedias

WESTLAW Topic No.260.

Notes of Decisions

In general 1

1. In general
Use of surface acreage content as basis of allocating daily allowable production of oil and gas between unitized drilling unit and individual nonunitized drilling unit sharing common source of oil and gas did not deny individual unit's owners equal protection of laws, since such allocation was intended to encourage participation by all drilling units sharing common source in secondary recovery operations and to prevent nonparticipating units from enjoying benefits of secondary recovery without sharing in costs. Texas Pacific Oil Co., Inc. v. Petro Grande, Inc. (Miss. 1976) 328 So.2d 660. Constitutional Law – 240(8).

1964 Fieldwide Unitization Act, as amended in 1972, did not change law that surface acreage content was basis of allocating daily allowable production of oil and gas between unitized drilling unit and individual nonunitized drill unit sharing common source of oil and gas. Texas Pacific Oil Co., Inc. (Miss. 1976) 328 So.2d 660. Mines and Minerals – 92.50.

§ 53-3-109. Extension of units
(a) The State Oil and Gas Board, after notice and hearing, by entry of new or amending orders, may from time to time enlarge the unit area by approving agreements adding to the unit operation a pool or pools or any portion or portions or combinations thereof not theretofore included, and extensions of existing pools. Any such agreement, in providing for allocation of production from the unit area, shall first allocate to each pool or portion thereof so added a portion of the total production of oil or gas, or both, from all pools affected within the unit area, as enlarged, such allocation to be based on the relative contribution which such added pool or portion or extensions thereof are expected to make. during the remaining course of unit operations, to the total
production of oil or gas, or both, to the unit as enlarged. The production so allocated to each added pool or portion thereof shall be allocated to the separately owned tracts in the added unit area on the basis of the relative contribution of each such tract, as provided in paragraph (c) of Section 53-3-105. The remaining portion of unit production shall be allocated among the separately owned tracts within the previously established unit area in the manner provided by the unitization agreement. Orders promulgated under this paragraph shall become operative at 7:00 a.m. on the first day of the month next following the day on which the order becomes effective under the provisions of paragraph (b) of this section.

(b) An order promulgated by the board under paragraph (a) of this section shall not become effective unless and until (1) all of the terms and provisions of the plan of unitization and the unitization agreement relating to the extension or enlargement of the unit area or to the addition of a pool or portions thereof or extensions of existing pools to unit operations have been fulfilled and satisfied and evidence thereof has been submitted to the board, and (2) the extension or addition effected by such order has been agreed to in writing by the owners or lessees of at least seventy-five percent (75%) in interest on the basis of and in proportion to the surface acreage content of the area or pools or portions thereof or extensions of existing pools to be added to the unit operation by such order and also by at least seventy-five percent (75%) (exclusive of royalty interests owned by lessees or by subsidiaries or successors title of any lessee) in interest of the royalty owners on the basis of and in proportion to the surface acreage content in the area or pools or portions thereof or extensions of existing pools to be added to the unit operation by such order, and evidence thereof has been submitted to the board, and (3) the owners of the existing unit have agreed in the manner provided in Section 53-3-107 or in accordance with the terms of the unitization agreement, to the extension or addition. In the event all of the above requirements are not fulfilled within twelve months from and after the date of such order, it shall be automatically revoked.

(c) After the operative date of an order promulgated under this section, costs and expenses of operation of the unit, as enlarged, shall be governed by paragraph (e) of Section 53-3-105. Adjustment among the owners of the unit area, as enlarged, (not including royalty owners) of their respective investments wells, tanks, pumps, machinery, materials, equipment and other things and services of value attributable to the operation of the unit area, as enlarged, shall be governed by paragraph (d) of Section 53-3-105.


Historical and Statutory Notes

Derivation:
Code 1942. § 6132-105.
§ 53-3-111. Allocation of production

The portion of unit production allocated to a separately owned tract within the unit area shall be deemed, for all purposes, to have been actually produced from such tract, and operations with respect to any tract within the unit area shall be deemed for all purposes to be the conduct of operations for the production of oil or gas, or both, from each separately owned tract in the unit area. However, when an oil, gas and mineral lease contains land partially within and partially without said unit area, the unit agreement and production from the unit shall have no force and effect on lands lying outside of such unit area and failure of the lessee or lessees thereof to drill and develop such lands lying outside said unit area within one (1) year or during the term of the lease, whichever is a longer period of time, from the date of determination of the unit area by the State Oil and Gas Board shall render such lease or leases on lands lying outside said unit area void and of no force and effect, unless otherwise held by production other than from unit production.

Laws 1964, Ch. 236. § 6; Laws 1972, Ch. 365. § 4, eff. from and after passage (approved April 24, 1972).

Historical and Statutory Notes

Derivation:
Code 1942, § 6132-106.

Notes of Decisions

In general

1. In general

Oil and gas lease was not divided, pursuant to Mississippi Compulsory Fieldwide Unitization Act or judicial precedent, at time of unitization. Palmer Exploration, Inc. v. Dennis (S.D. Miss. 1989) 30 F. Supp. 734, affirmed 896 F.2d 552. Mines and Minerals – 92.79.

§ 53-3-113. Production by others unlawful

From and after the effective date of an order of the board-entered under the provisions of Sections 53-3-101 to 53-3-119, the operation of any well producing from the unit area defined in the order by persons other than the unit operator or persons acting under the unit operator’s authority, or except in the manner and to the extent provided in such plan of unitization, shall be unlawful and is hereby prohibited.
Laws 1964, Ch. 236, § 7, eff. from and after passage (approved June 5, 1964).

Historical and Statutory Notes

Derivation:

Library References

Key Numbers
Mines and Minerals - 92.79.
WESTLAW Topic No.260.

Encyclopedias

§ 53-3-115. Manner and time of notice

The notice provided for in Sections 53-3-101 to 53-3-119 shall be given in the time and manner as required by law and the rules and regulations of the Oil and Gas Board for hearings by said board and shall be completed at least thirty days before the date set for the hearing.

The secretary of the board shall, in addition thereto, mail a notice not less than thirty days prior to the date set for the hearing to all persons owning the interests in the land within the unit area which said secretary by due diligence can ascertain. The failure of said secretary, however, to mail said notice to any such owner shall not affect the validity of any hearing held pursuant to the notice published in accordance with the preceding paragraph, or any rule, regulation, or order issued pursuant to such hearing.

Laws 1964, Ch. 236, § 8, eff. from and after passage (approved-June 5, 1964).

Historical and Statutory Notes

Derivation:

Cross References

Appellate review by chancery court of final rules, regulations or orders of State Oil and Gas Board, see § 53-1-39.

Library References

Key Numbers
Mines and Minerals - 92.79.
WESTLAW Topic No.260.

Encyclopedias

§ 53-3-117. Administration of provisions

In administering Sections 53-3-101 to 53-3-119, the Oil and Gas Board shall be governed and controlled by the declaration of policy set out in Sections 53-1-1 et seq., and except as otherwise herein expressly provided, all proceedings held under Sections 53-3-101 to 53-3-119, including the filing of petitions, the giving of notices, the conduct of hearings and the entry of orders and appeals therefrom, shall be governed and controlled by the procedure provided for by Sections 53-1-1 to 53-1-47, inclusive, and Sections 53-3-1 to
53-3-21, inclusive, and the rules and regulations promulgated by the Oil and Gas Board pursuant to said sections. The definition of the terms used in Sections 53-3-101 to 53-3-119 shall be controlled by definitions contained in 53-1-3, and the rules and regulations promulgated by the Oil and Gas Board pursuant to sections 53-1-1 to 53-1-47, inclusive, and Sections 53-3-1 to 53-3-21, inclusive, unless a definition appearing in Section 53-1-3 is entirely inconsistent with the meaning and purpose of the term as used in Sections 53-3-101 to 53-3-119, in which event such term shall be given that meaning that is harmonious with and tends to effectuate the purposes of Sections 53-3-101 to 53-3-119.

Laws 1964. Ch. 236, § 9, eff. from and after passage (approved June 5, 1964).

Historical and Statutory Notes

Derivation:

Library References

Key Numbers
Mines and Minerals - 92.79.
WESTLAW Topic No.260.

Encyclopedias

§ 53-3-119. Appeal to chancery court

Any interested person adversely affected by any provision of Sections 53-3-101 to 53-3-119 or by any rule, regulation or order made by the State Oil and Gas Board thereunder, or by any act done or threatened thereunder, may obtain court review and seek relief by appeal, which appeal shall be to the chancery court of the county wherein the land involved, or any part thereof, is situated. The term “interested person” as used herein shall be interpreted broadly and liberally and shall include all mineral and royalty owners. Any interested party may appeal to the chancery court of the county wherein the land involved or any part thereof is situated, if appeal be demanded within thirty (30) days from the date that such rule, regulation or order of the board is filed for record in the office of the board.

Such appeal may be taken by filing notice of the appeal with the State Oil and Gas Board, whereupon the board shall, under its certificate, transmit to the court appealed to all documents and papers on file in the matter, together with a transcript of the record, which documents and papers together with said transcript of the record shall be transmitted to the clerk of the chancery court of the county to which the appeal is taken.

Except as hereinafore provided, such appeal shall be made in accordance with the provisions of Sections 53-1-39 and 53-1-41.

Laws 1964, Ch. 236, § 10; Laws 1972, Ch. 365, § 5; Laws 1984. Ch. 380, § 2, eff. from and after passage (approved April 18, 1984).

Historical and Statutory Notes

Derivation:
Code 1942. § 6132-110.
Oil company presented substantial evidence to support State Oil and Gas Board’s promulgation of rule, which allowed well in unitized drilling unit to produce twice daily allowable amount assigned to offsetting nonunitized well adjacent individual drilling unit. *Texas Pacific Oil Co., Inc. v. Petro Grande, Inc.* (Miss. 1976) 328 So.2d 660. Mines and Minerals – 92.62

**Underground Storage of Natural Gas or Compressed Air**

**Section**
- 53-3-151. Definitions.
- 53-3-153. Legislative findings.
- 53-3-155. Grounds for approving storage.
- 53-3-159. Eminent domain.
- 53-3-161. Right of condemnation without prejudice.
- 53-3-165. Offshore water storage prohibited.

**§ 53-3-151. Definitions**

As used in Sections 53-3-151 through 53-3-165: (a) “underground storage” shall mean storage in an underground reservoir, stratum or formation of the earth; (b) “natural gas” shall mean gas of sufficient purity to be capable of use for residential purposes; (c) “native gas” shall mean gas which previously has not been withdrawn from the earth, or which, having been withdrawn, is injected into a reservoir for purposes other than underground storage; (d) “compressed air” shall mean any nonhydrocarbon gas; and (e) “State Oil and Gas Board” or “board” shall mean the State Oil and Gas Board of Mississippi.

Laws 1971, Ch. 436, § 1; Laws 1992, Ch. 344, § 3, eff. from and after passage (approved April 20, 1992).
C.J.S. Gas §§ 3, 10, 12 to 14, 16 to 19.29.
Implied duty of oil and gas lessee to protect against drainage. 18 A.L.R.4th 14.
Appendix K
FIELDWIDE UNITS APPROVED BY MISSISSIPPI OIL AND GAS BOARD

1. Ashwood – Ashwood Gas Pool (3-19-86)
2. South Bolton – Mooringsport Formation (6-18-86)
3. Bakers Creek – Rodessa Formation (3-16-94)
4. Brookhaven – Lower Tuscaloosa Pool (5-17-50)
5. Carmichael – Eutaw on Pool (4-19-67)
6. Clear Springs – 4,600’ Wilcox and First Wilcox (9-21-88)
7. Crawford Creek – Cotton Valley “B” Oil Pool (10-16-96)
8. Cypress Creek – Smackover Oil Pool (4-17-74)
9. South Cypress Creek – Smackover “A” Oil Pool (6-28-73)
10. Dexter – Lower Tuscaloosa Formation (6-16-66)
11. Central Eucutta – Lower Tuscaloosa Formation (1-17-99), South Hosston Formation (9-15-99)
12. East Eucutta – Eutaw Oil Pool (4-20-66), North Christmas Formation (11-18-98),
    North Lower Tuscaloosa Formation (11-18-98)
14. Freedom – Lower Tuscaloosa “A” Sand (11-17-93)
15. Gitano – Mooringsport Formation (4-16-69)
16. Gillsburg – Lower Tuscaloosa L-5 Sand (8-16-89)
17. Glasscock – Minter Sand (9-19-68)
18. Gluckstadt – Smackover CO2 Pool (8-17-78)
19. Goodwater – Smackover Formation (4-22-82)
    Eutaw East Two Fault Block Oil Pool (9-15-99), Eutaw East Three Fault Block Oil Pool (11-17-99), Eutaw
    East One Fault Block Oil Pool – Central Segment (9-15-99)
21. West Heidelberg – Cotton Valley (2-18-70), Eutaw W-3 (3-15-67), WHERE Eutaw
    (4-17-74), Eutaw W-1 Fault Block Oil Pool (7-10- 95), Lower Cretaceous Formation (11-17-99), Cotton Valley Formation (11-17-99)
22. Horsehoe Lake – Smackover Oil Pool (5-21-80)
23. Jackson – Storage
24. Lake Como – Smackover Oil Pool (1-10-75)
25. Lake Utopia – Lower Smackover Oil Pool (7-16-81)
26. Langsdale – Eutaw (12-1-66)
27. Laurel – Mooringsport Oil Pool (5-20-92), Rodessa Formation (3-16-94), Sligo Oil Pool (10-19-94), 9,700’ Paluxy Formation (3-15-95), Lower Tuscaloosa Stringer Sand Oil Pool (4-19-95), Upper Paluxy Sand Oil Pool (11-20-96)
28. Liberty – Lower Tuscaloosa Oil Pool (9-1-85)
29. West Lincoln – Lower Tuscaloosa Pool (East Segment) (10-19-66)
30. Little Creek – Tuscaloosa Oil Pool (8-17-61)
31. Loring – Smackover Formation (5-19-54)
32. Mallalieu – Lower Tuscaloosa Oil Pool (N.E. Segment) (3-18-70) and Lower Tuscaloosa Oil Pool (West Segment) (3-18-82)
33. Martinville – Mooringsport (3-21-62), Sligo Oil Pool (6-21-95), Rodessa Oil Pool (1-4-96)
34. McComb – Lower Tuscaloosa Oil Pool (5-19-99)
35. McNeal – Upper Oil Pool of Lower Cotton Valley Oil Pool (2-19-86)
36. Millbrook – Lower Tuscaloosa Gas Pool (3-16-88)
37. North Mud Creek – McKittrick Sand Oil Pool (7-17-91)
38. Muldon – Storage-Chester Gas Pool (4-21-71)
39. Newtonia – Lower Tuscaloosa Oil Pool (6-16-88)
40. Olive – Lower Tuscaloosa on Pool (5-18-83)
41. Pickens – Eutaw Oil Pool (9-20-78)
42. Puckett – 10,500’ Mooringsport (7-19-72)
44. Quitman Bayou – 4,600’ Sand Oil Pool (11-17-65)
45. Raleigh – All pools below base of Ferry Lake and above top of Cotton Valley Formation (9-20-61)
46. West Raymond – Rodessa Consolidated Oil Pool (10-20-88)
47. Richardson Creek – 4,600’ Sand and First Wilcox (2-21-90)
48. St. Patrick – Lower Tuscaloosa “A” Sand Oil Pool (8-21-91)
49. Sandersville – Eutaw Formation (2-19-97)
50. Satartia – 9,200’ Rodessa Oil Pool, Second Sligo Oil Pool, 10,000’ Sligo Oil Pool, 10,150’ Sligo Oil Pool, 10,250’ Hosston Oil Pool, 10,270’ Hosston Oil Pool, 10,660’ Hosston Oil Pool and 10,700’ Hosston Oil Pool (2-21-68)
51. Shongelo Creek – Lower Cotton Valley Bay Springs Oil Pool (3-20-96)
52. Soso – Zone “A” Oil Sand, Zone “A” Gas Sand and Zone “B” Oil Sand (3-22-84)
53. Summerland – Upper Tuscaloosa Formation, Lower Tuscaloosa Formation, Upper Paluxy Formation, Mooringsport Oil Formation, Upper Wash-Fred Formation, Lower Paluxy Formation, Lower Wash-Fred Formation (1-19-66); Upper-Upper Wash-Fred Formation (7-20-66); Lower-Lower Wash-Fred (7-16-69); Middle Wash-Fred (1-17-68); Summit-Lower Tuscaloosa Oil Pool (11-29-62).
54. Tallahala Creek – Middle Smackover Oil Pool (5-17-72)
55. Thanksgiving – Lower Tuscaloosa “A” Sand (11-15-89)
56. Thomasville – Smackover Gas Pool (10-21-87)
57. Tinsley – Stevens “A” and “B” Sands (North Segment) (3-19-69), McGraw Sand (North Segment), (10-15-69), Woodruff (North Segment), Perry and Woodruff (West Segment) (9-16-70), Perry (North Segment) (9-18-68)
58. Vossburg – Lower Smackover Oil Pool (8-18-93)
59. Wolf Creek – Smackover Oil Pool (2-21-73)
60. East Yellow Creek – Eutaw 1 Oil Pool (3-14-72)
61. North Yellow Creek – Eutaw Oil Pool (7-21-71)
62. West Yellow Creek – Eutaw Oil Pool (9-15-71)
63. West Yellow Creek – Eutaw Oil Pool (9-15-71)
Appendix L
By Chisum, H.B. No.1624
A BILL TO BE ENTITLED
AN ACT

Relating to authorizing plans for unit operations for oil or oil and gas production.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:
SECTION 1. Subtitle C, Title 3, Natural Resources Code, is amended by adding Chapter 104 to read as follows:

CHAPTER 104. UNITIZATION
SUBCHAPTER A. GENERAL PROVISIONS

Section 104.001. SHORT TITLE.
This chapter may be cited as the Texas Enhanced Recovery Unitization Act.

Section 104.002. DEFINITIONS.
In this chapter:

(1) “Affiliate” means a corporation, partnership, or other legal entity that owns, is owned by, or is under common ownership with another corporation, partnership, or legal entity to the extent of 50% or more or that otherwise controls or is controlled by another corporation, partnership, or other legal entity. Affiliates of a common entity are also affiliates of each other.

(2) “Commission” means the Railroad Commission of Texas.

(3) “Common source of supply” means:

(A) a common reservoir as defined by Section 86.002; or

(B) separate multiple stratigraphic or lenticular accumulations of oil or gas or oil and gas that have been recognized and regulated as a common reservoir by the commission under Section 86.081 (b).

(4) “Extraneous substances” are hydrocarbon or other substances purchased or otherwise obtained from outside a unit area for injection into the common source of supply during unit operations.

(5) “Marketing” includes sales of production and associated gathering, storage, treatment, and compression.
(6) “Oil and gas” means “oil” and “gas” as defined by Section 85.001.

(7) “Plan of unitization” means a plan or agreement that is consistent with the requirements of this chapter between working interest owners and royalty owners in a common reservoir in which unit operations may be conducted to enhance the production of oil or oil and gas from the common reservoir above the volumes that would otherwise be produced by primary recovery operations only.

(8) “Primary recovery” means the displacement of oil or oil and gas from the earth into the well bore by means of the natural pressure of the reservoir, including artificial lift.

(9) “Royalty interest” means the right to, or interest in, oil and gas or proceeds of oil and gas production, other than a working interest.

(10) “Royalty owner” means the owner of a royalty interest.

(11) “Tract” means a parcel of land lying within the unit area that is under uniform royalty and working interest ownership.

(12) “Tract participation” means the percentage shown in the plan of unitization for allocating unit production to a tract.

(13) “Unit area” includes the surface area inside the boundaries of the unit and the common source of supply or the part of the common source underlying the surface area that may be reasonably required for conduct of unit operations.

(14) “Unit cost” or “unit expense” includes any cost or expense incurred in the conduct of unit operations.

(15) “Unit operations” means:

(A) operations, other than operations involving experimental or unproved enhanced recovery techniques, related to the production of oil and gas from the unit area, including:

(i) repressuring;

(ii) waterflooding;

(iii) pressure maintenance;

(iv) tertiary recovery operations; or
(v) any other similar operations that are incidental or necessary to increase the ultimate recovery of oil or gas, oil and gas, or other hydrocarbons from the proposed unit area; or

(B) the establishment and operation of the necessary facilities for the operations listed in Paragraph (A).

(16) “Unit operator” means the person designated under the plan of unitization to conduct unit operations, acting as operator and not merely as a working interest owner.

(17) “Unit participation of a royalty owner” means the percentage equal to the sum of the products obtained by multiplying the royalty interest of each royalty owner in each tract by the tract participation of that tract.

(18) “Unit participation of a working interest owner or unleased mineral interest owner” means the percentage equal to the sum of the products obtained by multiplying the working interest of the working interest owner in each tract or, if the working interest owner is an unleased mineral interest owner, the mineral interest of that owner in each tract, by the tract participation of that tract.

(19) “Unit production” includes all oil and gas or oil or gas produced and saved from a unit area after the effective date of the unit regardless of the well or tract in the unit area from which the oil and gas are produced. The term does not include the following substances if the working interest owners under a lease, contract, agreement, or unit plan have excluded the substances from unit production:

(A) recoverable extraneous substances injected into the common source of supply or used in well treatment or pressure maintenance;

(B) any production that is reinjected into the unit area, unless the reinjected production is later removed from the unit area for nonunit purposes or sold, in which case it will be considered to be unit production; or

(C) any production used or consumed in unit operations.

(20) “Working interest” means an interest in oil and gas by virtue of a lease, operating agreement, fee title, or otherwise, including a carried interest, the owner of which is obligated to pay, in cash, out of production, or otherwise, the owner’s share of the unit expense under the proposed or approved plan of unitization.
(21) “Working interest owner” means the owner of working interest.

Section 104.003. POWER AND AUTHORITY OF COMMISSION.

(a) The commission shall adopt any necessary rule, issue and enforce any necessary order, and perform all required acts necessary to carry out the purposes of this chapter.

(b) The commission in accordance with this chapter shall determine whether a plan of unitization, including the participation formula proposed under this chapter for all or part of a common reservoir is fair, reasonable, and equitable for all interests concerned and necessary to carry out the purposes of this chapter.

Section 104.004. APPLICABILITY.

(a) This chapter does not apply to:

(1) any common source of supply that has produced over five billion barrels of oil;

(2) a gas field that produces primarily dry gas or natural gas and condensate; or

(3) land that has been excluded from unitization under Section 104.027.

(b) This chapter does not affect or apply to a voluntary cooperative agreement in secondary recovery operations as provided by Subchapter B, Chapter 101.

Section 104.005. APPLICATION TO PUBLIC LAND.

(a) This chapter does not apply to land owned by the state or land in which the state has a direct or indirect interest.

(b) Except as provided by Subsection (c), this chapter does not amend, repeal, change, alter, or affect in any manner the authority or jurisdiction of the state, the commissioner of the General Land Office, or any board or agency of the state with respect to any land or interest in land in which the state, the commissioner of the General Land Office, or any board or agency of the state has jurisdiction or the unitization of such land.

(c) With the approval or consent, such approval or consent not to be unreasonably withheld, of the state, the commissioner of the General Land Office, or any board or agency of the state to a plan of unitization first obtained, or at the instance of the commissioner of the General Land Office, or with the consent of the board or agency having jurisdiction, the land in which the state
has an interest as described in this chapter may be unitized under this chap-
ter. In the event of such approval or consent of a plan of unitization, the plan of
unitization and unit operating agreement shall be subject to and incorporate
by reference all applicable statutes, rules, and regulations as they pertain to
land in which the state has an interest.

Section 104.006. CONFLICT WITH ANTITRUST ACTS.

(a) A plan of unitization and operation under an agreement that complies with
this chapter, is approved by commission order, and is found by the commis-
sion to be necessary to prevent waste and conserve the natural resources of
this state may not be construed to be in violation of Chapter 15, Business &
Commerce Code.

(b) If a court finds a conflict between this chapter and Chapter 15, Business &
Commerce Code, this chapter is intended as a reasonable exception to that
law that is necessary for the public interest described by Subsection (a).

(c) If a court finds a conflict between this chapter and Chapter 15, Business &
Commerce Code, and finds that this chapter is not a reasonable exception
to Chapter 15, Business & Commerce Code, the legislature intends that this
chapter, or any conflicting part of this chapter, be declared invalid rather than
that Chapter 15, Business & Commerce Code, or any portion of that chapter,
be declared invalid.

Section 104.007. APPEALS.

A person affected by an order of the commission issued under this chapter is en-
titled to judicial review of that order in accordance with Chapter 2001, Government
Code. The petition for review shall be filed in Travis County or in any county in which
the affected tract is located.

[Sections 104.008-104.020 reserved for expansion]
SUBCHAPTER B. APPLICATION PROCEDURES; CONSIDERATION AND APPROVAL OF PLAN

Section 104.021. APPLICATION FOR UNITIZATION.

(a) Any working interest owner or proposed unit operator may file an application with the commission requesting an order under this chapter for the unit operation of a common source of supply or a part of that common source of supply.

(b) The application shall contain:

(1) a description of the proposed unit area and the vertical limits and producing horizons to be included in that unit area with a map or plat attached;

(2) a statement of the type of operations contemplated for the unit area;

(3) a copy of a proposed plan of unitization and all agreements related to that plan that the applicant considers fair, reasonable, and equitable, including a unit operating agreement that contains provisions dealing with

(A) overhead rates, interest charges, costs directly associated with marketing of unit production, or any other profit or benefit that may accrue solely or in unequal shares to the unit operator;

(B) voting procedures;

(C) removal or replacement of the unit operator;

(D) allocation of unit expense;

(E) audit periods and rights to review all records pertaining to unit operation;

(F) dissolution of the unit; and

(G) disclosure regarding any use by the unit operator of any affiliate of the operator for marketing production or for products or services costing more than $100,000 in the aggregate for each particular product or service;

(4) an allegation of the facts required to be found by the commission under Section 104.024;
(5) an allegation that the applicant has obtained at least the minimum required approval of the plan of unitization as required by Section 104.026; and

(6) an allegation that:

(A) each owner of an interest in the oil and gas under each tract in the proposed unit area has been given an opportunity to enter into the unit on the same basis; and

(B) the applicant or proposed unit operator has made a good faith effort to voluntarily unitize all interests in the proposed unit area.

(c) The applicant shall submit with the application a list including:

(1) the name of each person owning or having a working or royalty interest in the proposed unit area and each offset operator adjacent to the proposed unit area; and

(2) an address for each person listed or a statement that the person’s address is unknown.

Section 104.022. HEARING REQUIRED.

(a) On receipt of an application, the commission shall promptly set the matter for hearing and cause notice of the hearing to be given as provided by Section 104.023.

(b) At the hearing an affected person is entitled to be heard, to introduce evidence, and to introduce and cross-examine witnesses.

Section 104.023. NOTICE.

(a) Notice of the application and the time and place of the hearing on the application shall be mailed, postage prepaid, not later than the 31st day before the hearing date to each working interest owner, operator, and royalty owner in the unit area and to each offset operator whose name and address is shown on the list: provided by the applicant under Section 104.021.

(b) Notice of an application and the time and place of hearing shall be published once a week for four consecutive weeks in a newspaper of general circulation authorized by law to publish legal notices in the county or counties in which the land involved is located, or in another newspaper or publication designated by the commission, not later than the 31st day before the hearing date.
Typographical errors in a notice that are not material do not affect the validity of the notice.

Section 104.024. FINDINGS OF COMMISSION.

After notice and a hearing as provided by Sections 104.022 and 104.023, the commission shall determine whether:

1. The unitized operation of the common source of supply or the part of the common source of supply involved in the plan of unitization is reasonably necessary to conduct unit operations and the plan of unitization is reasonably necessary to prevent waste, protect correlative rights, and promote the conservation of oil or oil and gas;

2. The present value of the estimated incremental recovery of oil or oil and gas from the common source of supply is reasonably anticipated to exceed the present value of all estimated incremental expenses incident to conducting unit operations;

3. The productive limits of the common source of supply or the part of the common source of supply proposed for unitization have been reasonably defined by development and the area proposed for unitization is reasonably necessary and sufficient for unit operations;

4. The unsigned owners of interests in the oil and gas under each tract of land in the proposed unit area have been given a reasonable opportunity to enter into the unit on the same basis as the owners of interests in the oil and gas under the other tracts in the unit area and the applicant or proposed unit operator has made a good faith effort to voluntarily unitize all interests within the proposed unit area;

5. The applicant has obtained approval for the plan of unitization from at least the minimum number of working interest and royalty interest owners required by Section 104.026;

6. The expense of establishing the unit and unit expenses that are to be charged as unit expenses are reasonable and necessary;

7. The expenses relating to unit operations will:
   
   A) Be for the common benefit of all persons with interests in the unit;

   B) Be allocated on a fair and equitable basis; and
(C) result in a profit, or other benefit that accrues solely or in unequal shares to the unit operator or an affiliate of the operator only if authorized by the plan of unitization;

(8) a working interest owner has a reasonable right to review all records pertaining to unit operations and a reasonable amount of time to audit unit expenses;

(9) the plan of unitization meets the requirements of Subchapter C and reasonably conforms to the requirements of this chapter; and

(10) the proposed plan of unitization, including the tract participation formula and percentages, is in all respects fair, reasonable, and equitable.

Section 104.025. UNITIZATION ORDER; EFFECT OF OPERATIONS.

(a) If the commission finds that all the requirements of Section 104.024 are met, the commission shall order:

(1) the unitized operation of the unit area; and

(2) unitization of all working interests and royalty interests in the unit.

(b) The order shall:

(1) unitize all interests of all owners in the area covered by the plan of unitization with the same effect as if those owners had executed the plan of unitization and had been parties to the unit agreement;

(2) approve the area of the common source of supply or the part of the common source of supply to be included in the unit area and the vertical limits of the common source of supply;

(3) approve the plan unitization, including the allocation of production and costs among tracts; and

(4) designate the initial unit operator named in the plan of unitization.

(c) Unit Operations on and production from any lease in the unit area for which a unitization order has been entered shall be considered for all purposes the conduct of unit operations on and production from each separately owned lease in the unit.

(d) If only a part of a lease is included in the unit, unit operations on or production
from the unit maintains an oil and gas lease as to the part excluded from the unit only if the excluded part of the lease would have been maintained under the lease.

Section 104.026. APPROVAL OF PROPOSED PLAN OF UNITIZATION BY WORKING INTEREST AND ROYAL TV OWNERS.

(a) A proposed plan of unitization must be approved in writing by:

(1) the owners, on a unit participation basis, of at least 80% of the aggregate unit working interests; and

(2) at least 80% of the owners, on a unit participation basis, of the aggregate unit royalty interests that complete and return the ballot provided for in Subsection (b).

(b) A ballot distributed to the owners of royalty interests must:

(1) state that the applicant will confirm by mail that the ballot has been received and whether it has been counted as a vote for or against the proposed plan;

(2) be sent by certified mail, return receipt requested, to each owner of a royalty interest in the proposed unit area, including each owner of an unleased mineral interest;

(3) be sent a second time by certified mail, return receipt requested, to any interest owner for whom a receipt from the first mailing is not returned after a reasonable effort has been made between the first and the second mailing to correct any address that appears to be inaccurate; and

(4) be accompanied by:

   (A) a copy of the proposed plan of unitization;

   (B) an objective summary of the proposed plan that is reasonably calculated to provide an ordinary royalty owner with an adequate understanding of how the royalty owner’s property interest would be affected by a favorable vote and how that interest would be affected by an unfavorable vote; and

   (C) a postage-paid reply envelope.

(c) A royalty owner may not be required to return a ballot earlier than the 14th day
after the date the owner receives the ballot and other information required by Subsection (b).

(d) The applicant shall confirm the receipt of each ballot and indicate to the royalty owner returning the ballot whether it has been counted as a vote for or a vote against the proposed plan.

(e) The commission shall dismiss the application if the commission finds that the applicant has not reasonably complied with Subsection (b), (c), or (d).

Section 104.027. EXCLUSION OF LAND.

(a) Land may be excluded from a unitization plan if, on the date the application for unitization is filed with the commission under Section 104.021:

(1) the land is not under current lease or agreement providing for permitting the exploration for or production of oil or oil and gas;

(2) the fee surface ownership has not been severed from the fee mineral ownership; and

(3) all the owners owning present possessory or future possessory interests in the land have elected to exclude the land from the proposed plan of unitization.

(b) Such owners shall be accorded an opportunity, but not be required, to make an election at least 30 days before balloting as provided for in Section 104.26.

(c) If land is excluded from unitization under this section, and unless the owners who elected to exclude the land and the unit owners subsequently otherwise agree, the owners who have elected to exclude land forfeit:

(1) any right to present and future production of oil or oil and gas from the unitized formation established under the plan of unitization; and

(2) any right to proceeds or other money arising from or associated with the production described by Subdivision (1).

Section 104.028 PARTIAL FIELD UNITIZATIONS

(a) Any party who claims that the exclusion of a tract from a proposed unit area will have an unreasonable adverse effect on the excluded tract has the burden of proving that claim by clear and convincing evidence.
(b) The commission may not deny an application for unitization under this chapter solely because the commission finds that exclusion of a tract from a proposed unit area will have an unreasonable adverse effect on the excluded tract. In that instance the commission shall issue an order under Section 104.25 approving the application on the condition that the applicant or unit operator offer participation in the approved unit under the unit expansion provisions of Section 104.072 or under the approved unit agreement.

Section 104.029. STATUS OF UNLEASED MINERAL INTERESTS.

Any mineral interest in the unit area that is unleased on the effective date of unitization is considered for purposes of unit participation:

(1) to have a royalty interest of one-fifth \((1/5)\) of that interest, unless the commission determines that a different royalty interest is reasonable under the circumstances; and

(2) to be a working interest to the extent of four-fifths \((4/5)\) of that interest, unless the commission determines that a different working interest is reasonable under the circumstances in order to consider the unleased interest or right to have a different royalty interest as provided by Subdivision (1), with all the rights and obligations of a lessee as if the mineral rights were leased.

[Sections 104.030 – 104.040 reserved for expansion]

SUBCHAPTER C. PLAN OF UNITIZATION

Section 104.041. AUTHORIZED PLANS.

(a) A plan of unitization may be proposed under this chapter only to establish units and cooperative facilities necessary for unit operations that are reasonably anticipated to substantially increase the recovery of oil above that which would be recovered by primary recovery alone.

(b) The proposed plan of unitization and the commission order approving the plan may provide for unit operation of less than the whole of a common source of supply if:

(1) the unit area is of a size and shape that is reasonably suitable for unit operations; and

(2) that operation will not have an unreasonable adverse effect on the other parts of the common source of supply that are not included in the plan of unitization.
Section 104.042. SINGLE OR MULTIPLE AGREEMENTS.

The plan of unitization may consist of one or more agreements that the applicant considers to be fair, reasonable, and equitable if the applicant submits each agreement to the commission as required by Section 104.021 (b)(3).

Section 104.043. PARTICIPATION; ALLOCATION OF UNIT PRODUCTION.

(a) The proposed plan shall provide for the apportionment and allocation of the unit production among the tracts in the unit area in order to reasonably permit a person entitled to share in, or benefit by, the production from a tract in the unit to receive a fair share of the unit production or other benefits.

(b) A tract’s fair share of the unit production shall be measured by the value of each tract and its contributing value to the unit in relation to like values of other tracts in the unit, taking into account the amount of acreage, the quantity of oil and gas recoverable from the tract, the tract’s location on the geological structure, the tract’s probable productivity of oil and gas in the absence of unit operations, or as many other factors, including other pertinent engineering, geological, or operating factors, as are reasonable.

Section 104.044. VOTING BY WORKING INTEREST OWNERS.

(a) The proposed plan of unitization shall establish a voting procedure for decisions by the working interest owners. The voting procedure need not be the same for each type of decision that may be made by the working interest owners if each working interest owner has a voting interest equal to that owner’s unit participation.

(b) Subject to reasonable limitations regarding voting frequency and in addition to other appropriate provisions, the plan must require an operator to submit the following matters to the working interest owners for a decision in accordance with the plan if petitioned to do so by the vote at least 15% of the non-operating working interest owners:

1. use of an affiliate of the operator to market production;

2. use of an affiliate of the operator for purposes other than marketing production, including acquisition of extraneous substances such as carbon dioxide for unit operation purposes; or

3. commencement of tertiary recovery operations.
Section 104.045. OPERATING AGREEMENT.

The proposed plan of unitization shall include a proposed operating agreement establishing:

1. the manner in which the unit will be operated, supervised, and managed by the unit operator in the conduct of unit operations;
2. the grounds on which a unit operator may be replaced for cause;
3. a procedure by which a unit operator may be replaced without cause;
4. allocation of and provision for payment of unit costs; and
5. the other matters required by Section 104.021 (b)(3).

Section 104.046. EFFECTIVE DATE AND TERMINATION DATE OF PLAN OF UNITIZATION.

(a) The proposed plan of unitization shall provide for the date on which the plan takes effect, the manner in which and the circumstances under which unit operations terminate, the settlement of accounts on termination, and notice by the unit operator to the public within 30 days after the effective date of the unit. After the commission by order adopts the plan of unitization, the unit operator shall give public notice by filing for record, in the real property records of the county or counties in which the unit area or any part of the unit area is located, a certificate containing:

1. the name of the unit;
2. the legal description of each tract included in the unit area and a description of the common source of supply or the part of the common source of supply included in the unit area;
3. the commission docket number;
4. the date of the commission order, including any supplemental orders, relating to approval of the plan of unitization;
5. the effective date of unit operations; and
6. a survey plat setting out the unit boundaries.

(b) The plan of unitization shall require the unit operator, not later than the 60th day after the date of termination of the unit, to file for record in each county in which the unit area is located.
which any part of the unit area is located a certificate stating the date the unit operations terminated.

Section 104.047. FINANCING UNIT OPERATIONS.

(a) The plan of unitization shall provide the manner in which unit costs, including overhead and interest, are determined, allocated, and charged to the separately owned tracts or interests and shall include a detailed accounting procedure for all charges and credits incident to unit operations. The unit costs chargeable to a tract or interest shall be paid by the working interest owners who, in the absence of unit operations, would be responsible for the costs and expenses of developing and operating the tract or interest.

(b) The plan shall also:

(1) provide for the auditing of all records of the unit operator pertaining to unit operation;

(2) require the operator to maintain records sufficient to show the reasonableness of any payments to affiliates of the operator and of other unit costs;

(3) provide for disclosure so that working interest owners will be informed in a timely manner whether particular costs and expenses relate to activities undertaken by an affiliate of the operator; and

(4) include provisions that disallow or govern situations in which a profit or other benefit accrues solely or in unequal shares to the operator.

Section 104.048. ATTACHMENT OF PROCEEDS OF PRODUCTION TO COVER DEBTS OF NONPAYING WORKING INTEREST OWNERS.

(a) The plan of unitization shall allow the attachment of proceeds of production due any owner who is not paying the owner’s share of the costs of unit operations as compensation to each paying owner. The compensation amount may not exceed 175% of the nonpaying (owner’s share of unit costs, which shall be considered to include all interest, with the maximum compensation amount to be set by the commission in each case.

(b) The plan of unitization shall provide that all of the unit production allocated to a nonpaying working interest owner that does not pay the share of the unit expenses charged and any additional compensation amounts applied to that nonpaying owner under Subsection (a) may be appropriated by the unit operator and marketed and sold for the payment of unit expenses and additional compensation amounts. Any sale proceeds remaining after payment of unit expenses and additional compensation amounts shall be remitted to the nonpaying working interest owner.
(c) As to an interest located in the unit that is not leased by the effective date of unitization, one-fifth (1/5) of the production attributable to the unleased interest, or a different amount determined by the commission under Section 104.097(b), is considered as royalty interest and shall be free and clear of all unit expenses and additional compensation amounts. Four-fifths (4/5) of the unleased interest, or a different amount determined by the commission under Section 104.097(b), is considered as working interest and is subject to being financed or carried under this section.

Section 104.049. SALE BY NONSIGNING WORKING INTEREST OWNER.

(a) A nonsigning working interest owner may elect to offer through the unit operator to sell and assign all of that owner’s working interest in the unit area to the unit operator and to other working interest owners who desire to acquire a portion of the interest under this section:

(1) at any time after a plan of unitization has been filed and before the 60th day after the later of the first day on which:

(A) the order approving the plan of unitization is final; or

(B) all appeals are final;

(2) at any time after the commencement of tertiary recovery operations and before the 120th day after the day of the commencement of those operations; or

(3) at any time after an order is final that approves an amendment referenced in Section 104.071(c) or (d) and before the 60th day after the first day on which that order is final.

(b) The unit operator shall consider the offer to sell the interest and shall promptly negotiate any differences in value with the nonsigning working interest owner who is offering to sell.

(c) If the unit operator and the nonsigning working interest owner, who is offering to sell, agree on a price, payment shall be made in accordance with the sales agreement. The interest to be acquired shall be offered for a period of 21 days to all signing working interest owners, including the operator, at cost in proportion to each owner’s working interest ownership unless the signing working interest owners agree on a different proportion. Any part of the interest not acquired or contracted for by the signing working interest owners within the prescribed period shall then be offered for a period of 15 days to those persons who acquired or contracted for the other part of the interest in proportion to each person’s percentage of acquisition. The unit operator
shall purchase any part of the interest remaining after the 15-day period expires.

(d) If the unit operator and the nonsigning working interest owner who is offering to sell are unable to agree on a sales price, the nonsigning working interest owner who is offering to sell may withdraw the offer to sell not later than the 30th day after the date of the offer to sell or may elect to be carried or otherwise financed under Section 104.048 and may submit the issue to binding arbitration or to qualified impartial appraisers to set the price of the nonsigning working Interest owner’s interest in the unit. If the nonsigning working interest owner who is offering to sell chooses the use of impartial appraisers, that person and the unit operator each shall select a qualified impartial appraiser and the two selected appraisers together shall select a third qualified impartial appraiser. The arbitrator, arbitrators, or selected appraisers shall establish a price that is equal to the higher of the fair market value of the interest and the fair market value the interest would have in the absence of the proposed unitized operations. The nonsigning working interest owner who is offering to sell shall pay one-half of the appraisal or arbitration costs. Each acquiring interest owner shall pay a part of the remainder of the appraisal or arbitration costs in proportion to the owner’s working interest ownership.

(e) The nonsigning working interest owner who is offering to sell shall sell for the price set by the procedure described by Subsection (d), and the unit operator shall purchase that interest for that price, subject to the participation of other signing working interest owners as provided by Subsection (c).

Section 104.050. INVESTMENT ADJUSTMENTS AND PROPERTY TAKEN OVER.

The plan of unitization shall provide for the procedure and basis for adjustment among the working interest owners in the unit area of their respective investment in wells, tanks, pumps, machinery, materials, equipment, facilities, and other items of value taken over and used in unit operations. Investment adjustments and credits for property taken over may not be used as a factor in setting participation percentages and allocations of unit production under Section 104.043.

Section 104.051. ADDITIONAL PLAN PROVISIONS.

The plan of unitization may include any additional provisions approved by the commission that are consistent with the findings required by Section 104.024.

[Sections 104.052 – 104.070 reserved for expansion]
SUBCHAPTER D. AMENDMENT OF PLAN OR ORDER OF UNITIZATION; EXPANSION OF UNIT AREA

Section 104.071. AMENDMENT OF PLAN OR ORDER FOR UNITIZATION.

(a) A commission order approving unitization may be amended in the same manner and subject to the same conditions as are required for an original order providing for unitized operations.

(b) Approval of an amendment by royalty owners is not required if the amendment affects only the rights and interests of working interest owners.

(c) An amendment to an order may not, without the aggregate approval of at least the minimum percentage of the working interest and royalty interest ownership required under Section 104.026 for approval of unitization and compliance with Section 104.005, change:

(1) the percentage of unit oil and gas production allocated to each tract in the plan approved by the original or amended order approving the existing unit;

(2) the percentage of unit expenses allocated to each tract in the plan of unitization approved by the original or amended order for the existing unit; or

(3) the unit operations from secondary recovery operations to tertiary recovery operations.

(d) An amendment to an order may not, without the aggregate approval of at least the minimum percentage of the working interest ownership required under Section 104.026 for approval of unitization, change a provision of the operating agreement dealing with:

(1) overhead rates or any other profit or benefit that may accrue solely or in unequal shares to the unit operator;

(2) voting procedures;

(3) change of operator procedures;

(4) dissolution of the unit; or

(5) disclosure provisions regarding the use of affiliates of the operator.

(e) This section does not apply to an order:
(1) expanding an existing unit area under Section 104.072; or

(2) creating a new unit area under Section 104.073.

Section 104.072. EXPANSION OF UNIT AREA.

(a) In accordance with this section and subject to Section 104.073, an existing unit area may be expanded to include additional nonunitized tracts under the terms contained in the plan of unitization for the existing unit if the working interest owners and the royalty interest owners in each additional tract or tracts and in the existing unit area approve the expansion by the same percentages and in the same manner as required by Section 104.026 and the requirements of Section 104.005, if applicable, for the creation of a unit. The requirements for creating a unit under this chapter apply to the expansion of the unit area under this section.

(b) Allocation of unit production from the expanded unit shall be calculated first by allocating to the expansion area a portion of the total production of oil or gas or both oil and gas from the unit area as enlarged. That allocation shall be based on the relative contribution to the total production of oil or gas or both oil and gas that the expansion area is expected to make during the remaining course of unit operations. If the expansion area consists of separately owned tracts, the production allocated to the expansion area shall be allocated to the separately owned tracts in proportion to the relative contribution of each of those tracts as provided by Section 104.043. The remaining portion of unit production shall be allocated among the tracts in the existing unit area in the same proportions as those set out in the existing plan of unitization.

Section 104.073. ENLARGEMENT INCLUDING ALL OR PART OF PREVIOUSLY ESTABLISHED UNIT.

(a) The commission may not combine two or more units created under this chapter or parts of units created under this chapter unless each working interest or royalty owner in each unit or part to be combined has agreed to the combination.

(b) A commission order combining units or parts of units created under this chapter, in allocating unit production between the previously established units or parts of units to be combined, shall first treat each unit or part to be combined as a single tract for purposes of production allocation. The part of unit production that is allocated to each unit or part to be combined shall then be allocated among the separately owned tracts included in the previously established units or parts in the same proportion as provided in each previous commission order establishing a unit all or part of which is combined.
under this section.

[Sections 104.074 – 104.090 reserved for expansion]

**SUBCHAPTER E. UNIT OPERATIONS**

**Section 104.091. STATUS OF PRODUCTION PROCEEDS; STANDARD OF CARE; DISTRIBUTION.**

(a) Unit production, proceeds from the sale of production, or other receipts may not be treated or taxed as income or profit of the unit. All unit production and proceeds are income of the owners to whom or to whose credit the production or proceeds are payable under the plan of unitization.

(b) The unit operator does not become an agent or a fiduciary of a working interest owner to whom production or proceeds are payable solely by reason of receiving or disbursing production or proceeds. When disposing of production for working interest owners, a unit operator who is not an agent or a fiduciary shall act with the same standard of duty and care as is required in the plan of unitization. In the absence of such a standard, the operator shall act as would a reasonably prudent operator under the same or similar circumstances. The standards set forth in this subsection shall apply throughout this section as this section affects working interest owners. Provided that a unit operator who is not an agent or a fiduciary has acted accordingly, the unit operator shall not be liable to any working interest owner who elects to have the owner’s share of unit production disposed of by the unit operator for losses sustained or liability incurred as a result of the operator’s actions in selling or disposing of others’ production.

(c) The unit operator shall make available to any working interest owner, or to any royalty interest owner who has the preexisting right to take the owner’s production in kind, to whom production or proceeds are payable the opportunity to elect either to have the owner’s share of production marketed by the unit operator or to market the owner’s own production. The operator, or any affiliate of the operator that markets production at or in the vicinity of the unit, shall market such production of electing owners, so that all electing owners receive the same price and proportionate share of premiums and other compensation as the unit operator, or an affiliate of the operator marketing at or in the vicinity of the unit, receives for its share of unit production except to the extent that prior contractual commitments or express specific terms of a contract entered into in good faith disallow or prohibit such sharing or marketing of additional production. This subsection shall not be construed to require that profits, compensation, or other benefits received by the operator or an affiliate of the operator that are realized on transactions occurring beyond the point of first sale at the unit or
in the vicinity of the unit shall be shared with or distributed to the owners electing to have their production marketed by the operator.

(d) Unless otherwise provided in the plan of unitization, any working interest owner, or any royalty interest owner who has the preexisting right to take the owner’s production in kind, to whom production is allocable or proceeds are payable shall make an initial election to either market the owner’s own production or have the owner’s production marketed by the unit operator within 30 days of the effective date of the commission order approving the unit. Unless otherwise provided in the plan of unitization, such initial marketing election shall be effective as of 60 days following the effective date of the commission order approving the unit. Unless otherwise provided in the plan of unitization, subsequent marketing elections shall be made on an annual basis following the initial election by written notification to the unit operator at least 45 business days before the expiration of each interval. Failure of an owner to make any timely election under this subsection shall be considered an election by that owner, for the relevant period, to have the owner’s production marketed by the unit operator.

Section 104.092. LIABILITY OF WORKING INTEREST OWNER.

(a) The liability of a working interest owner for payment of unit expense is several and not joint or collective.

(b) Except as provided by this subsection and Section 104.048, a working interest owner in a tract is not liable, directly or indirectly, for more than the amount charged to that owner’s interest in the tract.

(c) Unless otherwise specifically agreed to by the parties as part of a plan of unitization approved by the commission, any environmental condition or liability existing before the effective date of the commission order approving the unit remains the sole responsibility of the party or parties responsible for that environmental condition or liability before the effective date of the commission order approving the unit.

Section 104.093. LIEN FOR COSTS.

(a) Subject to any reasonable limitations in the plan of unitization, a unit operator has a lien on the leasehold estate and other oil and gas rights in each separately owned tract, the interest of the owners in the unit production, and all equipment in the possession of the unit to secure the payment of the amount of the unit expense and other additional compensation charges as provided for in Section 104.048 charged to each separate working interest.

(b) The lien established under this section does not attach to the royalty interest
Section 104.094. EFFECT OF UNIT OPERATIONS ON EXPRESSED OR IMPLIED COVENANTS AND CONDITIONS.

(a) To the extent a lease, division order, or contract covering lands in the unit area relates to the common source of supply or the part of the common source of supply included in the unit area, all terms of the lease, division order, or contract, express or implied, shall be construed by giving due regard to the plan of unitization approved by the commission. Operations conducted in accordance with a plan of unitization approved by the commission are presumed to comply with those terms unless there is an irreconcilable conflict between the lease, division order, or contract and the approved plan of unitization. If there is an irreconcilable conflict between the lease, division order, or contract and the approved plan of unitization, the plan controls, but the lease, division order, or contract terms shall be regarded as modified only to the extent necessary to conform to the plan.

(b) Notwithstanding any other provision of this chapter, without a separate voluntary agreement supported by consideration, a plan of unitization may not:

(1) cause a royalty interest to become liable for any part of unit expense that the interest is not otherwise obligated to pay;

(2) reduce a royalty interest fraction;

(3) alter an express surface use restriction, including a restriction on the use of freshwater, that exists in a lease or contract on the date the application authorized by Section 104.021 is filed; or

(4) alter a provision of a lease or contract providing for indemnification or similar compensation in the event the actions of one person cause another person to become liable for damages to the environment or for a violation of a statute, rule, or common-law standard that serves to protect the environment.

(c) A surface use conflict that is not governed by express lease or contract terms shall be accommodated or otherwise resolved after giving due regard to the plan of unitization as provided by this section.

(d) Section 104.091 shall not be construed to diminish an operator’s duty to market production on behalf of a royalty interest owner.
Section 104.095. DISTRIBUTION OF UNIT PRODUCTION.

Except as authorized by this chapter or in a plan of unitization approved by the commission, the unit production shall be distributed among, or the proceeds paid to, the owners entitled to share in the production from each tract in the same manner that those owners would have shared in the production or proceeds from the tract if the unit had not been established.

Section 104.096. MODIFICATION OF PROPERTY RIGHTS OR TITLES.

Except to the extent that the parties affected by the plan of unitization otherwise agree, a commission order entered under Section 104.025 does not alienate, convey, cross-convey, transfer, or change title or ownership, legal or equitable, of a person in a parcel of land or the oil and gas rights in that parcel.

Section 104.097. ROYALTY OBLIGATIONS; BURDENS; UNLEASED INTERESTS.

(a) Each working interest owner who is the owner of an interest in an oil and gas lease is responsible for the payment of all royalty, overriding royalty, or other lease burdens affecting the owners leasehold estate unless the plan of unitization provides otherwise.

(b) One-fifth (4/5) of the production or proceeds attributable to any unleased interest located in the unit area, free of all unit expense and free of any lien, shall be allocated to that interest unless the commission determines that a different allocation is reasonable under the circumstances. Four-fifths (4/5) of any unleased interests in the production or proceeds shall bear its pro rata share of all unit expense and is subject to any lien provided by this chapter or the plan of unitization. If the commission allocates more than one-fifth (1/5) of the production or proceeds free of all unit expense and free of any lien, the commission shall make an equal, opposite adjustment in the part of production or proceeds allocated to the interest that is to bear expense and be subject to liens.

Section 104.098. UNIT OWNERSHIP OF PRODUCTION, PROCEEDS, AND ACQUIRED PROPERTY.

(a) The part of the unit production allocated to any tract and the proceeds from the sale of that production are the property and income of the owners to whom or to whose credit the production and proceeds are allocated or payable under the order for unit operations.

(b) Any property that is acquired in the conduct of unit operations and charged as an item of unit expense is owned by the working interest owners in the unit area as provided in the plan of unitization.
SECTION 2.

The importance of this legislation and the crowded condition of the calendars in both houses create an emergency and an imperative public necessity that the constitutional rule requiring bills to be read on three several days in each house be suspended, and this rule is hereby suspended, and that this Act take effect and be in force from and after its passage, and it is so enacted.
Appendix M
WORKING INTEREST OWNER LIFELINE OPTIONS
PROPOSED AMENDMENT TO HB 1624

PROBLEM ADDRESSED. Some working interest owners have raised a concern that their revenue stream from their primary production will be endangered in a compulsory unitization under HB 1624.

THE AMENDMENT. This amendment provides an additional option for working interest owners. Even if a working interest owner does not select one of these options, all of the protections provided in HB 1624 are still available to them. If you are a working interest owner in the proposed unit area, you have the following two options:

1. NO RISK-GUARANTEED CASH FLOW. Have the cash flow associated with the production of the remaining primary reserves under your property protected for the life of the unit. You get the proceeds from these reserves minus the costs to produce them. Same as if no unit had been formed. These costs are based upon the working interest owner’s historical costs to produce. Under this option you tell the unit operator, I do not wish to participate in the costs of producing the secondary reserves. Protects cash flow only.

   NO RISK-GUARANTEED CASH FLOW PLUS RIGHT TO SHARE IN UP-SIDE POTENTIAL. Have the cash flow associated with the production of the remaining primary reserves under your property protected for the life of the unit. You get the proceeds from these reserves minus the costs to produce them. Same as if no unit had been formed. These costs are based upon the working interest owner’s historical costs to produce. Under this option you tell the unit operator, I do wish to participate in the costs of producing the secondary reserves, but only when the incremental recovery actually happens and pay my share of unit costs plus the penalty out of the proceeds due me from the incremental recovery. Protects cash flow with right to participate in the upside potential of secondary recovery.

   NON-JOINDER PROTECTIONS STILL AVAILABLE. Working interest owner still has right to say no to the unit and be protected under current provisions. The working interest owner still has the right to force a buyout of his interest up until 60 days after commission order.

Section 104.002(15). UNIT INCREMENTAL ENHANCED RECOVERY PRODUCTION

Means the amount of monthly production allocated to that working interest owner under the plan of unitization exceeding the working interest owner’s remaining monthly production attributable to the working interest owner’s share of monthly preunitized production as established in Section 104.028.
Section 104.027. WORKING INTEREST OWNER OPTIONS.

Each working interest owner, excluding the unit operator, shall have the following option:

(a) Elect, subject to commission approval, to receive the rights associated with the deemed primary production net revenues of the working interest owner as established in section 104.028 throughout the life of the unit and the right to share in unit incremental enhanced recovery production; or

(b) Elect, subject to commission approval, to receive the rights associated with the deemed primary production net revenues of the working interest owner as established in Section 104.028 throughout the life of the unit and the right to share in unit incremental enhanced recovery production subject to the payment of cost of unit operations as established in Section 104.048. Payment of unit expenses under Section 104.048 shall only be made from the working interest owner’s unit incremental enhanced recovery production. The working interest owner’s share of unit expenses shall be credited by the amount of the working interest owner’s daily average production costs established under Section 104.028 before computing the compensation amount established in Section 104.048. At no time during the life of the unit shall the unit expenses associated with the working interest owner’s share of unit incremental enhanced recovery production be paid from the proceeds or allocated production of the primary production of the working interest owner. In the event of a working interest owner making the election provided in this Section 104.027, the operator shall have the obligation to pay or cause to be paid, such working interest owner’s royalty owners their full share of unit production, unless such royalty owner’s, the working interest owner, and operator voluntarily agree otherwise.

Section 104.028. ESTABLISHMENT OF DEEMED PRIMARY PRODUCTION NET REVENUES AND COSTS OF WORKING INTEREST OWNER.

(a) The primary production net revenue of a working interest owner shall be deemed to equal the revenue associated with the daily average production attributable to that working interest owner minus the sum of royalty obligations and daily average production costs to produce the daily average production.

(b) The daily average production attributable to the working interest owner shall be deemed by:

(1) the commission establishing the working interest owner’s average daily preunitized production level prior to the filing of the plan of unitization, based on a six (6) month or other period established by the commission; and

(2) the commission establishing a production decline curve that is agreed
by the working interest owner and the operator or in the alternative if the working interest owner and the operator fail to agree, by the commission.

(c) The daily average production costs to produce the daily average production shall equal an amount agreed to by the working interest owner and the operator. If the working interest owner and the operator fail to agree then that amount which the commission fairly and reasonably determines the working interest owner would incur from the working interest owner’s operator immediately prior to the filing of the application if the leases and associated production were still in primary production.

Section 104.029. WORKING INTEREST OWNER NET PROCEEDS AND MARKETING RIGHTS.

The working interest owner shall receive all net proceeds attributable to the deemed primary production of the working interest owner minus the daily average production costs associated with the deemed primary production. At no time during the life of the unit may the unit operator or any other working interest owner attach or place a lien upon the working interest owner’s deemed primary production net proceeds established under Subsection 104.027(a) or Subsection 104.027(b) for the benefit of unit incremental enhanced recovery production. A working interest owner electing under this section shall have the same rights as any other working interest owner in the unit as to the marketing of the deemed primary production and its share of unit incremental enhanced recovery production as provided for in Section 104.091.

Section 104.030. WORKING INTEREST OWNER’S ROYALTY OBLIGATION.

This section shall not be construed to diminish a working interest owner’s duty to pay royalty.

[Amendment of Subsection 104.048(a)]

Section 104.048. ATTACHMENT OF PROCEEDS OF PRODUCTION TO COVER DEBTS OF NON-PAYING WORKING INTEREST OWNERS.

Except as otherwise provided under Sections 104.027 and 104.028:

(a) The plan of unitization shall allow the attachment of proceeds of production due to any owner who is not paying the owner’s share of the costs of unit operation as compensation to the paying owner or owners. The compensation amount may not exceed 175% of the non-paying owner’s share of unit costs, which shall be deemed to include all interest, with the maximum compensation amount to be set by the commission in each case.