§ 9.01 Introduction

This chapter provides an overview of the creation, development, and regulation of split estates, including the statutory, regulatory, and contractual schemes to protect the rights of surface owners, while still allowing for development of the mineral estate.

In most countries, including common law countries, the state (crown) holds title to all oil, gas, and other minerals and mineral deposits, including those that are located beneath privately owned lands. The United States is unique in having extensive private ownership of mineral interests, which is largely a historical accident. The U.S. government intended to retain lands that contained valuable mineral deposits by withdrawing those lands deemed valuable from location and entry, but it did not realize the extent of such deposits in the United States. Thus, up until the late nineteenth to early twentieth century much of the land opened for agricultural development passed title to potentially valuable mineral deposits to the grantee/patentee. This ownership structure has facilitated and also complicated mineral development.

The term “split estate” is used when the surface estate and all or part of the mineral estate in a particular parcel are not owned by the same party. The act of creating the split estate is referred to as “severance”—the surface and mineral estates are “severed.” In general, a split estate is created when a private fee owner either conveys the surface to another party, reserving to the grantor the underlying minerals, or conveys the minerals to the other party, reserving the surface estate to the grantor. Split estates are also created when the U.S. government patents land to private parties, while reserving the minerals (see section 9.05[3] for a discussion of private surface over federal minerals). The surface and mineral estate components of a split estate can be held separately by various parties: private, federal, state, and Indian tribes (see section 2.04 and see section 3.04 for a discussion of Indian tribal lands). The severance of the mineral estate from the surface
estate is now a well-established principle in property law that allows title to each estate (and to components of the mineral estate) to vest in different owners. Until there is severance, there is just the one estate.

Thus, to use an oil and gas example, if a split estate exists, the oil and gas company must obtain a lease from the mineral estate owner and, depending on the operation, it also may be necessary to reach a surface use agreement with the surface estate owner. If the federal government owns the mineral estate, leasing efforts are with the Bureau of Land Management (BLM); if the state owns the mineral estate, leasing efforts are with the appropriate state agency; and if the mineral estate owner is an Indian tribe, leasing efforts are with the Bureau of Indian Affairs. Generally, it is not necessary to reach an agreement with the surface owner if the company does not need surface access to develop the minerals. An agreement with the owner of the surface estate is necessary if such access is required for the particular mineral exploitation operation (subject to the rules applicable to split estates discussed in section 9.03 below) or if, for example, the mineral owner/lessee needs to lay pipelines across the surface owner’s lands or requires road access to adjacent lands.¹

§ 9.02 Identifying a Split Estate

Prior to leasing and mineral development, the operator will typically obtain a report or title opinion that starts with the U.S. patent or initial conveyance and goes forward to the date of the county record search. Often with patented mining claims, research begins with the date the claim was located, which could be several years prior to the date of the U.S. issued patent. Knowledge of the various laws under which U.S. lands were patented is important because the effects of those laws vary in terms of which, if any, part of the mineral estate was reserved to the U.S. government. The title examination addresses each conveyance affecting the subject tract, and in the case of a split estate, it will include a chain of title for each of the severed estates, both surface and mineral. Often ownership of the mineral estate is further fragmented on a divided or undivided basis, on a stratigraphic basis, or on a basis that distinguishes among the various types of minerals that can be found in the particular tract.

Thus, a drilling title opinion must address all ownership of all minerals (not just oil and gas). In addition, the title opinion must note any recorded

¹Even if there is no split estate, leases of oil and gas rights often contain “no surface occupancy” provisions in order to protect the high value of the surface for non-mineral surface uses, to protect existing structures or facilities, or to make certain the surface is available for development of other valuable minerals. In such a case, the oil and gas must be developed by wells drilled on adjacent lands. It is rare to find such a provision in private hardrock and coal mining leases, because most mining operations involve some surface impact or occupancy.
restrictions on surface access to develop the minerals. It is important to note that the term “mineral” can have various meanings depending upon the circumstance under which the estates were severed. Therefore, record title to a particular type of mineral or mineral deposit may not be clear from the record. See Chapter 3 for more detailed discussions of mining claims and “other minerals.”

In the event of stratigraphic division of the mineral estate, the drilling title opinion should (to the extent it can be discerned from the documents available for examination) clearly describe stratigraphic limits (boundaries) of each component, e.g., “from the surface to 1,500 feet below the surface of the land,” or “from 3,200 feet below the surface of the earth to 5,200 feet below the surface of the earth,” or “the producing interval noted in the logs for that certain well located in Section 00, Township XX, Range XX and being operated by ABC Oil & Gas Operator.” If the mineral estate is divided based upon stratigraphic location or mineral type, then the operators/developers of the different components of the mineral estate should work together to reach a cooperative development plan. In some states, statutes dictate how multiple mineral developments should occur, the general rule being that a developer acquires its interest subject to the existing burdens in the mineral estates, e.g., subject to existing mineral or oil and gas leases.

§ 9.03 Developing a Split Estate

[1] Dominance of Mineral Estate

The general (common law) rule in the case of a split estate is that the mineral estate is “dominant.” This means that the owner of the surface estate cannot prohibit the owner of the mineral estate from accessing and developing the minerals. It also means that the owner of the mineral estate owns an implied right to use so much of the surface of the particular tract of land as is reasonably necessary to access and develop the minerals that exist in that tract. This dominance is, of course, subject to any limitations that are imposed by applicable case law, statutory law, or regulation. The theory that supports this basic rule is that the creator of the split estate did not intend to give rights to the surface estate owner that would render the mineral estate valueless.

The courts have long struggled with compatible development of the two estates. Early cases adopted the principle that the owner of the mineral estate must have “due regard” for the needs of the owner of the surface estate. Beginning in the early 1900s, a series of decisions, primarily by Texas courts, gradually replaced this principle with the “reasonably necessary” test; i.e., there were no restrictions on the mineral owner’s use of the surface if such use was “reasonably necessary” to develop the minerals.
[2] Accommodation Doctrine

The trend in favor of absolute dominance by the mineral owner was modified somewhat in 1971 when the Texas Supreme Court in *Getty Oil Co. v. Jones*, 470 S.W.2d 618 (Tex. 1971), adopted what became known as the “accommodation doctrine,” which attempts to balance the two competing interests, rather than give the mineral owner absolute dominance. The court held in *Getty* that the inconvenience to the mineral lessee of adopting an alternative to the proposed method of operation (surface use) must be weighed against the surface owner’s right to use the surface in a manner that did not unreasonably interfere with the lessee’s right to develop the minerals. The court established a four-part test in applying the accommodation doctrine:

1. There must be an existing use of the surface by the surface owner (i.e., potential future uses would not be considered);
2. The lessee’s proposed use must preclude or impair such existing use;
3. The lessee must have reasonable alternatives available; and
4. The lessee must show that any alternative use by it of the surface, other than its proposed use, is impracticable and unreasonable under the circumstances.

The accommodation doctrine is now the rule in most states that have considered the issue, either through case law alone or in combination with statutory law. For example, in Colorado, the owners of the surface estate and the mineral estate, respectively, must have due regard for each other’s land use requirements in making use of the estate in question. In some cases, this requires the owner of the mineral estate to change its planned use of the surface to accommodate the surface estate owner, at least to the extent possible consistent with the right of the owner of the mineral estate to develop the minerals. *Gerrity Oil & Gas Corp. v. Magness*, 946 P.2d 913 (Colo. 1997).

[3] Destruction of the Surface Rule

For mining purposes, some states used what has come to be known as the “destruction of the surface rule” to determine whether a substance is a mineral owned by the mineral owner or a substance owned by the surface owner and thus determine which party has the right to develop or prevent development of the substance. Several Texas cases in the 1970s and 1980s held that in determining whether a substance is a mineral, the test is “whether any reasonable method of extraction will destroy or deplete the surface.” *Wojtasczyk v. Burns*, 744 S.W.2d 354, 356 n.2 (Tex. App.—Corpus Christi 1988, no writ) (emphasis added) (citing *Moser v. U.S. Steel Corp.*, 676 S.W.2d 99, 100 (Tex. 1984)). If any reasonable method
of extraction would destroy the surface, earlier Texas cases held that the
substance in question was then by definition part of the surface estate. The
Texas courts in the Wojtasczyk and Moser cases, however, ruled that specific
minerals (such as uranium) were, as a matter of law, a part of the mineral
estate regardless of the manner in which they would be developed. Those
cases also held that a reservation of specific minerals that could only be
extracted by mining methods that would destroy the surface would give
rise to broader implied rights to use the surface than general reservations
of “oil, gas and other minerals.”

Currently in the Rocky Mountain region, the destruction of the surface
rule is used primarily as an aid in construing the extent of the implied
rights the mineral owner has to use the surface. The rule can prove helpful
in making an initial determination of the breadth of those rights, but if
there is uncertainty as to whether the mineral owner has a right to destroy
the surface, and it is unclear from the record title, then a judicial determi-
nation may ultimately be necessary to determine ownership. However, it is
good policy for mining operators and landmen to determine whether the
proposed operations would render the surface unusable in its native form.
In Smith v. Moore, 474 P.2d 794 (Colo. 1970), for example, the Colorado
Supreme Court analyzed a split estate where the mineral owner planned to
use strip mining to develop the minerals and held that “when the surface
and mineral estates have been severed, the owner of the mineral estate may
remove the underlying minerals but must support the surface and cannot
destroy the surface by strip mining.” Smith, 474 P.2d at 795 (citing Barker
v. Mintz, 215 P. 534, 535 (Colo. 1923)). Thus, if the surface would be
destroyed by mining operations, and there is no explicit grant in the record
of the right to destroy the surface, purchasing the surface or leasing it with
an option to purchase may be a preferred alternative.²

§ 9.04 Legislation

[1] Surface Damage/Use Statutes

A number of states have adopted surface damage/surface use statutes to
provide protection to surface owners while allowing for the development
of the mineral resources. It is important to review each state statute to
determine what minerals are covered by the statute; some statutes only
apply to oil and gas development; others apply more broadly. The follow-
ing states covered by this Handbook have adopted a version of a surface
damage/surface use statute:

²It is important to carefully review the law in each state; the rule established by those
Colorado cases is not necessarily the rule in every state.
In most of the states that have these surface damage/surface use statutes, the mineral owner is required to provide notice to the surface owner prior to commencing drilling operations. Such notice usually must be written notice given a minimum of 10 days before operations may be commenced. The typical generic notice includes the following:

1. Location of entry onto surface;
2. Date drilling operations will commence;
3. A copy of the drilling application;
4. Name, address, and telephone number of the operator;
5. An offer to negotiate in good faith any proposed changes to the proposed plan of operations; and
6. In some states, a copy of the relevant statute.

In some states, the county permitting department or agency also requires notification to all surface owners and contiguous surface owners by certified mail.

Most state laws require that the surface owner be compensated for pipeline installation and any other surface disturbances. If the operator and the surface owner cannot reach an agreement as to damages, the operator has the right to proceed with development, and damages will be resolved by litigation or arbitration. In Colorado, an operator cannot proceed with the construction of a pipeline without a written agreement executed by both parties, unless it uses a pipeline company that has the power of condemnation.

In some states, such as Wyoming, the appropriate state agency will not approve an application for permit to drill (APD) without certification by an operator that it has provided notice of the proposed operations to the surface owner, attempted good faith negotiations to reach an agreement or
waiver, and reached an agreement with the surface owner or, in the absence of an agreement because of a failed negotiation, the operator must certify that it has obtained a surface protection bond.


Several states also have dormant mineral interest (or mineral lapse) acts to aid in rejoinder of the severed mineral interests with the surface estate in specific circumstances. Under these acts, if the mineral estate has been severed, and if the mineral interest is undeveloped and/or unclaimed for a designated period of time, the mineral interest is reunited with the surface and the split estate no longer exists. There are considerable differences in the statutory details among the states that have adopted some form of dormant mineral interest or mineral lapse acts, including the types of “use” that will preserve the mineral interest, the permissible period of nonuse, and whether the statute is designed primarily to terminate unused mineral interests (e.g., Indiana, Louisiana, Michigan) or to merely identify and locate the mineral interest owners (e.g., Kansas). It is recommended to seek local legal counsel to understand the impacts the dormant mineral acts may have on your project.

[3] Pore Space Ownership

A unique situation arises with split estates when the use of pore space is at issue. Oil and gas operators may want to use pore space to store gas or to inject waste water. The majority of the states that have addressed this issue treat pore space ownership as vested in the surface owner. North Dakota and Wyoming have enacted statutes covering subsurface pore space ownership and follow the majority rule, vesting ownership in the surface owner, codified as follows:

- **North Dakota**: N.D. Cent. Code §§ 47-31-01 to -08.

Several states, including Montana, New Mexico, and Utah, have unsuccessfully attempted to pass legislation that addresses subsurface pore space ownership. It is important to review state law if subsurface pore space is at issue.


The Surface Mining Control and Reclamation Act of 1977 (SMCRA) regulates active coal mining and reclamation of abandoned coal mining lands, both federal and private. The underlying theme is uniformity in the regulation of surface coal mining in the United States. SMCRA created the Office of Surface Mining Reclamation and Enforcement (OSM)
within the U.S. Department of the Interior, which oversees all surface coal mining on federal lands and oversees state programs approved by OSM in accordance with SMCRA. Approved state programs for coal mining on non-federal lands allow states to issue permits, inspect mines, and take enforcement actions if necessary.

Under SMCRA, the following is required:

- A permit issued by the OSM or approved state program is required for any surface coal mining in the United States.
- The operator is required to post a bond to ensure that reclamation will occur after the completion of mining operations.
- Written consent of the surface owner is required to be filed with the Secretary of the Interior prior to the federal government entering into a lease for coal deposits unless documentation can be provided to the Secretary evidencing a conveyance that expressly grants or reserves the right to utilize surface mining to extract coal.

Thus, if a landman is involved in coal exploration and development, the landman should:

1. Obtain a title report or opinion to determine the ownership of the coal estate and the ownership of the surface estate;
2. Determine which agency to contact based on the ownership of the coal; and
3. Obtain the most recent set of guidelines from the applicable agency to prepare for filing the permit and for obtaining the surface owner consent, if necessary.

§ 9.05 Regulations

[1] State Agencies

Almost all states have one or more regulatory agencies that are responsible for regulating mineral development. In most cases, the particular agency was created by the state legislature to promote mineral development but also to require that mineral development occur in a safe, efficient, and environmentally responsible manner. With respect to oil and gas, for example, most state agencies require operators to obtain permits prior to drilling a new well and to file production reports after the well is completed or plugged and abandoned. With respect to mining, most state agencies require operators to obtain permits prior to any surface disturbance, to go through a much more detailed and complex permitting process for actual mining operations, to post bonds or other surety to ensure reclamation of affected lands, and to file reports upon completion of reclamation. These agencies do not adjudicate the respective rights and obligations of surface
§ 9.05[2]  Split Estates and Surface Access

and mineral owners, although they will facilitate negotiations between the parties. See Appendix M for a list of state agencies regulating mineral development.

[2] Local Agencies

With the expansion of oil and gas development, many county or parish governmental agencies have established an oil and gas liaison department that reviews oil and gas development to address traffic congestion, damage to county roads, surface owner damages, pipeline location, and other mineral development issues.

If there is a conflict between regulations by state or local agencies, the question of preemption arises, i.e., does state law preempt county/local law? In general, the court will look at whether there is an operational conflict between the state and local agencies and, if so, an evidentiary hearing may be held to try to resolve such conflict. If it is determined that there is a direct conflict, normally state law preempts local regulation.

This has been a major issue in Colorado, where the courts have generally sided with the Colorado Oil and Gas Conservation Commission (COGCC) in the case of state versus local regulation. In 1992, in Voss v. Lundvall Bros., Inc., 830 P.2d 1061 (Colo. 1992), and Board of County Commissioners, La Plata County v. Bowen/Edwards Associates, Inc., 830 P.2d 1045 (Colo. 1992), the Colorado Supreme Court determined that local jurisdictions do not have the authority to prohibit all oil and gas development within their boundaries. The courts have not, however, found that the COGCC’s jurisdiction preempts all aspects of local regulation, and the state and local agencies typically end up regulating different aspects of the exploration and development process and are encouraged to work together.

Similarly, the Colorado Supreme Court has held that local jurisdictions do not have authority to ban certain mining techniques. In Colorado Mining Ass’n v. Board of County Commissioners of Summit County, 199 P.3d 718 (Colo. 2009), the court ruled that Summit County could not ban the use of cyanide or other toxic/acidic chemicals in heap leach mining operations, because state law (the Colorado Mined Land Reclamation Act) preempted the county’s regulations in that field.

Conflicts between local and state regulation regarding oil and gas or mining development are likely to continue as localities seek to restrict or control mineral development within their boundaries to address the concerns of their constituents. Colorado has become a battleground for home rule versus state regulation of oil and gas development, and several of the larger operators have negotiated memorandums of understanding (MOU) with the affected localities that govern their operations within
the town boundaries and the use of town roads to access such operations or their operations beyond town boundaries, accepting restrictions that go beyond those imposed by the COGCC in order to promote a harmonious relationship with the localities.


[a] Creation; Early Rules of Ownership

The United States began reserving minerals in patents with the Coal Lands Acts of 1909 and 1910, which authorized the United States to reserve all coal from lands patented to settlers. While the mineral reservations under the Coal Lands Acts were limited to coal, mineral reservations under subsequent legislation included all minerals. Congress passed the Agricultural Entry Act of 1914 and the Stock-Raising Homestead Act of 1916, both of which mandated mineral reservations when surface patents were issued by the United States and granted the lessee of a federal reserved mineral interest the right to mine and remove the minerals and occupy as much of the surface as reasonably necessary to remove the minerals. These acts also required the lessee to pay for damages to crops and surface improvements or to post a bond with the Secretary of the Interior to pay for such damages. The issue of whether sand and gravel are conveyed by a mineral reservation is of increasing importance because of the widespread use of sand in the hydraulic fracturing process. This is determined generally on a state-by-state basis; however, the U.S. Supreme Court in *Watt v. Western Nuclear, Inc.*, 462 U.S. 36 (1983), held that gravel is considered a mineral if reserved to the United States in lands patented under the Stock-Raising Homestead Act of 1916.

According to the *American Law of Mining* § 200.02 (2d ed. 2012), because of the ambiguity under the above described acts in resolving whether a mineral lessee or mineral claimant has the right to use the surface in such a way that it destroys it without the consent of the surface owner, operators generally have two practical options: (1) obtain control of the surface, or (2) reach a mutually satisfactory agreement with the surface owner. Federal locatable minerals reserved under the Stock-Raising Homestead Act of 1916 have specific notice requirements associated with them, such as the requirement to file a Notice of Intent to Locate a Mining Claim (NOITL) (Form 3830-3) with the appropriate BLM State Office prior to staking a mining claim or entering such lands to explore for minerals. According to 43 U.S.C. § 299, and as described on the BLM website, the following items are required by statute to be in a NOITL:

(1) Surface owner name and address;
(2) Claimant name and address;
(3) Legal description of the lands;
(4) A map of the land subject to mineral exploration, including access routes; and
(5) Dates when the exploration will begin and end.

The following regulatory requirements must also be included in a NOITL:

(1) Service fee;
(2) Proof of surface ownership;
(3) Certified mail receipt card proving surface owner received a copy of the NOITL;
(4) Surface owner telephone number;
(5) Claimant’s telephone number;
(6) Total number of acres covered by the NOITL; and
(7) Description of proposed mineral activity.

By filing a NOITL the designated land is segregated from other forms of appropriation for 90 days provided that all of the statutory requirements are met and the NOITL is accepted.

Other federal acts under which patents may have been issued but that reserved minerals to the United States include the Pittman Underground Water Act of 1919 (affects Nevada only) (BedRoc Ltd., LLC v. United States, 541 U.S. 176 (2004), held that sand and gravel are not “valuable minerals” within the meaning of the Pittman Underground Water Act of 1919), the Taylor Grazing Act of 1934, the Small Tract Act of 1938, and the Federal Land Policy and Management Act of 1976 (FLPMA). The federal government today owns approximately one-third of the total land area (onshore) of the United States and an additional 63 million acres of severed mineral rights, with 44 million of those acres including oil and gas. Due to the variety of statutes under which minerals were reserved to the federal government and split estates created, it is important to obtain a title report or opinion that indicates the specific act the lands were patented under.

In 1928, the Supreme Court in Kinney–Coastal Oil Co. v. Kieffer, 277 U.S. 488, 504–08 (1928), established the following rules of split estate ownership, which originally applied to federal minerals and private surface, but has since been used as a general template for other combinations of split estate ownership involving the federal government:

(1) The mineral estate or use is dominant;
§ 9.05[b]

(2) The lessee has the right to use so much of the surface as is reasonably necessary to prospect for, mine, and remove the minerals;

(3) The surface owner’s use cannot be incompatible with the rights of the lessee;

(4) The mineral owner’s right of access is an appurtenant right to the leasehold and is not a separate right to be purchased from the surface owner;

(5) The surface owner is not entitled to profits from the mineral estate;

(6) The lessee is liable to the surface owner for damages to crops and tangible improvements;

(7) The surface owner is entitled to damages only, and then only for crops and improvements consistent with the patent’s purpose;

(8) Damage settlements may be negotiated with the surface owner; and

(9) In the absence of successful negotiations, the lessee may post a bond or other undertaking and occupy the surface estate.

[b] BLM’s Onshore Order No. 1

If the mineral estate or part of it is owned by the federal government, but the surface is owned by private parties, the leasing process is managed by the Bureau of Land Management (BLM). See Appendix M for a list of the BLM State Offices for the states covered by this Handbook. BLM’s Onshore Oil and Gas Order No. 1 (Onshore Order No. 1) provides the leasing requirements for federal oil and gas interests. Onshore Order No. 1 allows a lessee to obtain surface access in split estate situations even in the absence of surface owner consent or waiver, so long as the lessee can demonstrate that it made a good faith attempt to negotiate surface access with the surface owner without success and posts a bond for the benefit of the surface owner.

Onshore Order No. 1 details the procedures that must be followed prior to drilling. The procedures are summarized as follows:

(1) Filing of a sundry notice or application for permit to drill (APD);

(2) 30-day notice period;

(3) Onsite inspection; and

(4) Certification of a surface access agreement or showing of an unsuccessful attempt to achieve a surface access agreement (after good faith efforts).

For further information on the leasing and operations processes specific to federal minerals that are under private lands, see BLM & U.S. Forest Service, *The Gold Book–Surface Operating Standards and Guidelines for Oil*
and Gas Exploration and Development (4th ed. 2007). Originally issued in 2005, the Gold Book provides information on the requirements for obtaining permit approval for oil and gas operations. It includes tips on environmentally responsible operations on federal lands and on private surface over federal minerals. The 2007 Gold Book incorporates changes resulting from Onshore Order No. 1.


From time to time, the United States acquires the surface estate through land exchanges between private parties, or state governments. Generally, this is accomplished through quiet title actions against adverse claimants, or sometimes through private purchases to consolidate surface use areas and access to the federal lands. Operators should be aware that in these acquisitions of surface rights the United States did not always acquire the minerals. The minerals were either not part of the acquisition because they had been reserved in prior conveyances, or the minerals were reserved by the conveying grantor. In either case this has created another split estate that needs to be understood and dealt with. Further, one cannot rely on the BLM Master Title Plat for accurate, complete notation of ownership on federal acquired lands. Instead, a complete review of the county records should also be conducted.

In general, one should consult with local legal counsel and with the appropriate BLM office for information regarding the specific processes required for accessing federal surface over private minerals. Operators are often instructed by the particular BLM office to apply for rights-of-way, special use authorizations, licenses, or other permits that are needed for roads and support facilities on or off the private mineral or oil and gas lease.

§ 9.06 Surface Agreements

Operators and surface owners traditionally prefer to avoid using litigation or arbitration to define their respective rights and obligations. Operators are often willing to negotiate a reasonable surface use agreement with the surface owners in order to gain timely and hassle-free access and use of the surface. If there is no split estate, the oil and gas lease with a fee owner will often include surface damage provisions, with specified payments and provisions limiting the surface use to what is necessary, designating the size of the site, specifying the locations and width of access roads and rights-of-way, and requiring fencing.\(^3\) In the case of split estates, many of these

\(^3\)This is typically not the case for private hardrock and coal mining leases. These leases necessarily contemplate significant surface use, and possibly even destruction of the existing surface, given the intense surface use requirements of most mining operations.
same provisions are found in surface use agreements between an operator and the surface owner. See Form 28 for a sample surface use agreement for oil and gas and see Form 29 for a sample memorandum of surface use agreement for oil and gas. The memorandum of surface use agreement is entered into and recorded to provide notice of the surface use agreement without making all of that agreement’s terms public. See Form 27 for a sample damage release.

The surface use agreement continues to evolve as the exploration and development of resources changes. Operators are willing to put in time and effort and accept manageable delays in order to negotiate a forward-looking surface use agreement with the surface owner. As exploration and development of resources encroaches on more populated areas, surface access and mitigation measures become valuable and often necessary parts of the process. Consider the following “Forward-looking clauses”:

1. Timing and coordination of operations;
2. Predetermined, reserved, and platted future sites, access roads, and rights-of-way corridors;
3. Locations of any associated production equipment;
4. Coordination of future surface development;
5. Setback requirements (this may be required by regulations);
6. Noise mitigation (this may be required by regulations);
7. Visual aesthetics (this may be required by regulations);
8. Safety issues (this may be required by regulations);
9. Compensation for oil and gas directional and horizontal drilling costs from centralized drilling pads;
10. Timing of operations (i.e., based on planting, harvesting, or hunting seasons);
11. Use of surface or well water in exploration and production;
12. Disposal/discharge of produced water (this may be required by regulations);
13. Abandonment procedures following the completion of operations (this may be required by regulations); and
14. Reclamation (this may be required by regulations).

It may be in the operator’s best interest to facilitate negotiations with the surface owner by providing certain “sweeteners” beyond the basic required items, including:

1. Used drill pipe or production tubing for livestock corrals;
(2) Installation of cattle guards and gates;
(3) Grading, graveling, and maintenance of existing roads;
(4) Drilling water wells and transferring ownership of water supply for landowner use; and
(5) Repairing and upgrading fences.

With oil and gas development, the surface owner customarily will be concerned about pipeline locations, tank locations, electrical lines into drilling locations, and other surface disturbances. Often the surface owner will want the water, gas gathering lines, and roads to run along fence lines or parallel to existing roads in order to decrease surface disturbance. With hardrock and coal mining, the surface owner customarily will be concerned about the impact the mine will have on the surface. If an underground mine is proposed, the surface owner may be concerned about surface subsidence and potential impact on water wells and water-bearing formations. If a surface mine is proposed, the surface owner is more likely to be concerned about how the surface is going to be used and when, for how long, and when it will be reclaimed. Some operators prefer a mining lease agreement that includes an option to purchase the surface rights. This might be preferable for the surface owner as well, who may wish to sell ownership of the surface (and the potential environmental liabilities and responsibilities that may go with it) at the time when actual mine development is in the offing.

The well-advised operator will work with the party that has control of the surface in order to facilitate development of the minerals and to address future development of the surface consistent with the plan of mineral development. With mineral exploration and development moving into more heavily populated areas, this type of negotiation can take longer and may involve increased sharing of the costs that are necessary to accommodate concerns on both sides.

A developing trend in the oil and gas industry (and the norm in many locations) is the use of one drilling pad for multiple horizontal wells or multiple directional wells in order to minimize the surface “footprint.” The operator may negotiate with the surface owner a set amount for each well drilled on a pad that produces oil, gas, and other associated hydrocarbons from beneath the surface owner’s lands or from third-party lands. Alternatively, an operator may negotiate a one-time payment that accounts for multiple wells drilled both on and off the lands owned by the surface owner, but bottomed beneath the surface owner’s lands. See Chapter 11 for a discussion of the unique issues arising in unconventional oil and gas drilling and development.
§ 9.07 Conclusion

Responsible mineral development on split estate lands requires that the operator (and the surface owner) understand the governing case and statutory law and the applicable agency rules and regulations. Generally, it is in the best interest of both the operator and surface owner to respect each other’s needs and to work together to reach an accommodation that preserves the value of each estate. While the negotiation process can be lengthy, it usually is more productive than resorting to litigation or arbitration. The law is simply not clear enough, and the courts, arbitrators, and regulators are not always well-equipped to resolve these potentially emotional and difficult issues in a satisfactory manner. The goal of the parties should be to achieve a result that preserves value on both sides and allows for the orderly development of the mineral estate in conjunction with peaceful enjoyment of the surface estate. This goal is almost always more achievable through good faith negotiation.