Chapter 9

Innovative Approaches to Post-Mining Land Use Development

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Synopsis

§ 9.01. Introduction ........................................................... 299
§ 9.02. Background ......................................................... 301
§ 9.03. Exceptions from Approximate Original Contour (AOC) in Reclamation for Mountaintop and Steep Slope Mining .................................................. 302
[1] — Mountaintop Mining Exception ................................ 302
[2] — Steep Slope Mining Variance ................................. 304
[3] — Incidental Coal Extraction ................................... 306
§ 9.04. Office of Surface Mining Clarification of Exceptions to AOC Requirements for Mountaintop and Steep Slope Mining ............................................. 307
§ 9.05. State Governmental Programs Available to Facilitate Post-Mining Land Use Development Projects ................................................. 310
[1] — Kentucky ............................................................... 311
[2] — Virginia ................................................................. 311
[3] — West Virginia ......................................................... 312
§ 9.06. Federally Sponsored Projects in Partnership with State-Based Economic Development Programs for Post-Mining Land Use ........................................ 318
§ 9.07. Conclusion .......................................................... 321

§ 9.01. Introduction.

Surface mining operations in the Appalachian Region face increasing challenges from federal regulatory authorities. A Memorandum of Understanding dated June 11, 2009, was issued jointly by the Department

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of the Interior, the United States Army Corps of Engineers (Corps) and the United States Environmental Protection Agency (EPA) announcing an inter-agency action plan (‘IAP’) ‘designed to significantly reduce the harmful environmental consequences of Appalachian surface coal mining operations, while ensuring that future mining remains consistent with federal law.’ This inter-agency action plan includes short-term actions to minimize adverse environmental impacts and longer-term regulatory actions related to Appalachian mountaintop coal mining. The plan indicates that ‘Federal Agencies will work in coordination with appropriate regional, state, and local entities to help diversify and strengthen the Appalachian regional economy . . . .’ On April 1, 2010, the EPA released its comprehensive guidance to protect Appalachian communities from the harmful environmental impacts of mountaintop mining. This guidance document addresses many aspects of the permitting requirements under the Federal Clean Water Act and the National Environmental Policy Act for surface mining operations. At the same time, the EPA also issued two reports summarizing its conclusions about the impacts of surface mining activities. These federal initiatives emphasize the increased scrutiny being given to surface mining operations in the Appalachian Region.

When the EPA, Corps and Office of Surface Mining, Reclamation and Enforcement of the U.S. Department of the Interior (OSM), and perhaps ultimately the United States Congress, settle their criteria for the regulation of surface mining, it is likely that applicants seeking permits for mountaintop

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mining projects will have to include more robust post-mining land uses to receive their permits. States in the Appalachian Region where surface mining operations occur are beginning to create economic development programs that can be coordinated with the reclamation plans for surface mining operations. This chapter explores the relationship between variances from the approximate original contour (“AOC”) requirement for alternative post-mining land uses at mountaintop mining operations and economic development initiatives. To qualify for variances from AOC in applications for surface mining permits, economic development programs may be used by coal operators to justify alternative post-mining land uses.

§ 9.02. Background.

There is a general lack of economic diversification in the Appalachian coalfields of Eastern Kentucky, Southwest Virginia and Southern West Virginia, which is at least partly attributable to a short supply of land suitable for the development of commercial or public facilities. Creating useful development sites in these areas involves the movement and reconfiguration of large amounts of material on steep terrain, which is very costly. As the coal reserves are depleted in Appalachia, the remaining communities seek development locations for diversified agricultural, commercial, industrial, residential and public facilities that will maintain their economic viability. Surface mining operations can create large, relatively flat development sites in a cost-effective manner while recovering the highest possible amount of the remaining coal reserves. However, the Surface Mining Control and Reclamation Act of 1977 (SMCRA), 30 U.S.C. § 1234 et seq. (2010)(amended 1992), as well as the surface mining acts of Kentucky, Virginia and West Virginia,6 all require that lands disturbed by surface mine operations be reclaimed to approximate original contour, with limited exceptions.7

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7 The discussion in this chapter focuses on the provisions of SMCRA and its regulations, but the surface mine acts of Kentucky, Virginia and West Virginia have corresponding regulatory requirements. In order for these states to have primacy over their mining
§ 9.03. Exceptions from Approximate Original Contour in Reclamation for Mountaintop and Steep Slope Mining.

SMCRA recognizes that the benefits of alternatives to approximate original contour will sometimes justify the effects of mountaintop and steep slope mining methods. Valuable land uses can result from not returning a surface mine site to AOC during post-mining reclamation. Mountaintop mining is defined as the “surface mining of coal where the mining operation will remove an entire coal seam or seams running through the upper fraction of a mountain, ridge or hill . . . by removing all of the overburden and creating a level plateau or a gently rolling contour with no highwalls remaining, and capable of supporting postmining uses . . . .”

Under specified circumstances, mountaintop mining operations are exempt from approximate original contour requirements pursuant to SMCRA, 30 U.S.C. § 1265(c)(2010). Steep slope mining is surface mining on slopes that exceed an angle of twenty degrees. This type of surface mining is often referred to as area mining or point removal operations. Steep slope mining operations are also eligible for a variance from approximate original contour pursuant to SMCRA. In order to achieve such an exception or variance, however, these mining methods are required to comply with specific and involved criteria.


The Surface Mining Control and Reclamation Act employs three types of requirements in determining whether the intended post-mining land use for a mountaintop mining permit justifies an exemption from approximate original contour. The primary concept behind this regulatory scheme is that any loss of AOC must be compensated or mitigated by a higher and better

programs under 30 U.S.C. § 1253, the state surface mine acts must contain requirements that are at least as restrictive as SMCRA.

9  Id. § 1265(d)(4).
10  Id. § 1265(e).
enhancement of the public welfare or economic value of the post-mining land use proposed.

Alternative post-mining land uses for mountaintop mining are limited to certain categories. Specifically, the post-mining land uses permitted for mountaintop mining operations are industrial, commercial, agricultural, residential or public facilities, including recreational facilities. No other types of uses are allowed.

In addition, OSM imposes two separate regulatory standards to determine the value of the alternate post-mining land use relative to its pre-mining use. After consultation with the appropriate land-use planning agencies, if any, the proposed land use “is deemed to constitute an equal or better economic or public use of the affected land, as compared with premining use . . . .” Additionally, “[a]ll disturbed areas shall be restored in a timely manner to conditions that are capable of supporting (1) the uses they were capable of supporting before any mining; or (2) higher or better uses.” OSM takes the position that since section 785.14(c)(1)(i) incorporates the requirements of section 816.133(a), all alternative post-mining land uses must be “higher and better,” and not just the “equal” standard of section 785.14(c)(1)(i) for the post-mining use.

Assuming that the proposed land use satisfies this “higher and better” standard, an applicant for a mountaintop mining operation must comply with specific approval criteria for its exception from AOC. These criteria require the applicant to provide a detailed plan and appropriate assurances that the proposed post-mining land use will be:

[(1)] compatible with adjacent land uses;
[(2)] obtainable according to data regarding expected need and market;
[(3)] assured of investment in necessary public facilities;
[(4)] supported by commitments from public agencies where appropriate;

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11 Id. § 1265(c)(3).
12 Id. § 1265(c)(3)(A); 30 C.F.R. § 785.14(c)(1)(i)(2010).
13 30 C.F.R. § 816.133(a)(2010).
[(5)] practicable with respect to private financial capability for completion of the proposed use;
[(6)] planned pursuant to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the post-mining land use; and
[(7)] designed by a registered professional engineer in conformity with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site.14

The proposed post-mining land use must be compatible with existing state and local land use plans.15 Furthermore, the governing body of the unit of local government in which the land is located, and any state or federal agency having an interest, all must have an opportunity of not more than 60 days to review and comment on the proposed post-mining land use.16 Finally, all other requirements of SMCRA and its regulations must be met, apart from approximate original contour requirements.17

SMCRA imposes similar requirements to those of mountaintop mining in determining whether a steep slope mining operation is eligible for a variance from approximate original contour, based on its proposed post-mining land use.

Variances from AOC for steep slope mining are allowed for reclaimed land that is suitable for industrial, commercial, residential or public use (including recreational facilities).18 Unlike the mountaintop mining exception, the agricultural category, which includes forestry, does not qualify for an AOC variance for steep slope mining.

As is true with mountaintop mining, the loss of approximate original contour must be compensated or mitigated by a substantial enhancement

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16 Id. § 1265(c)(3)(D).
17 Id. § 1265(c)(3)(E).
18 Id. § 1265(e)(2); 30 C.F.R. § 785.16(a)(1)(2010).
of the public welfare or economic value derived from the post-mining use proposed. The same criteria for a “higher and better” post-mine land use applies to this steep mining variance as is required in mountaintop mining referenced in the “Mountaintop Mining Exception” section above.\textsuperscript{19}

Steep slope mining is also subject to specific approval criteria to qualify for a variance from AOC. An applicant for a steep slope mining variance from AOC must satisfy the following approval criteria:

1. Show that the watershed of the area will be improved and the highwall will be completely covered with backfill material sufficient to maintain stability after mining and reclamation;\textsuperscript{20}

2. Include in the application a written request from the surface landowner that the desired variance for the alternative post-mining land use be granted;\textsuperscript{21}

3. “The alternative postmining land use requirements . . . are met”;\textsuperscript{22}

4. The proposed use must be designed and certified by a qualified registered professional engineer in conformity with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site;\textsuperscript{23}

5. Place only that amount of spoil material off of the bench that is necessary to achieve the post-mining land use, ensure the stability of spoil retained on the bench, and meet all other requirements of SMCRA and its regulations;\textsuperscript{24}

6. Federal, state and local government agencies with an interest in the proposed land use have an adequate period in which to review and comment on the proposed post-mining land use;\textsuperscript{25}

\textsuperscript{19} 30 U.S.C. § 1265(c)(3)(A); 30 C.F.R. § 785.14(c)(1)(i); 30 C.F.R. § 816.133(a).
\textsuperscript{20} 30 U.S.C. § 1265(e)(1); 30 C.F.R. § 785.16(a)(3).
\textsuperscript{21} 30 U.S.C. § 1265(e)(2); 30 C.F.R. § 785.16(a)(4).
\textsuperscript{22} 30 C.F.R. § 816.133(d)(2).
\textsuperscript{23} 30 U.S.C. § 1265(e)(3); 30 C.F.R. § 816.133(d)(5).
\textsuperscript{24} 30 U.S.C. § 1265(e)(4); 30 C.F.R. 816.133(d)(8).
\textsuperscript{25} 30 U.S.C. § 1265(c)(3)(D).
(7) All applicable requirements of SMCRA and its regulations are met, other than AOC.26

These qualifications for exceptions from approximate original contour requirements for mountaintop removal and steep slope mining require the satisfaction of numerous standards when the mining permit application is submitted, which is often several years before mining is completed and final reclamation activities are undertaken. Economic development projects such as public buildings, industrial parks and shell buildings could not strictly comply with these standards at the time of permit application. Regulators and mine operators alike were often challenged by their complexity, and, as a consequence, very few economic development projects were combined with reclamation plans.


A third method of coal removal that falls outside of SMCRA is sometimes used in conjunction with the creation of development sites. SMCRA exempts surface coal mining operations that are an incidental part of federal, state or local government-financed highway or other construction projects.27 Coal mining activities are exempt from regulation under SMCRA where incidental coal extraction means the removal of coal is necessary to accomplish the planned construction. This exception only applies to coal extracted from the right-of-way of a road or the boundaries of the area directly affected by other types of government-financed construction.28 A government-financed construction means construction projects in which at least 50 percent of the project funding is financed by either a government agency’s budget or from general revenue bonds.29 Surface mining operations that qualify for this exemption are sometimes used to create sites for large-scale development in a cost-effective manner.

Portions of the King Coal Highway in McDowell and Mingo Counties, West Virginia, and the federal prison constructed in the McDowell County

26 Id. § 1265(c)(3)(E).
27 Id. § 1278(2)(2006); 30 C.F.R. § 707.11 (2010).
28 30 C.F.R. § 707.1 (2010); Id. § 707.5.
29 Id. § 707.5.
Industrial Park in West Virginia are examples of this SMCRA exception. Up to 50 percent of the budget for each of these projects was subsidized by the removal of coal that was not otherwise recoverable from their construction areas.

§ 9.04. **Office of Surface Mining Clarification of Exceptions to Approximate Original Contour Requirements for Mountaintop and Steep Slope Mining.**

During the development of the regulatory programs under SMCRA and individual state surface mining acts, surface mine permit applicants found it difficult to design economic development projects that complied with the post-mining land use requirements for variances from approximate original contour as applied by regulatory agencies. Specifically, state and federal regulators often required a specific development project in the post-mining land use plan to have all of its elements in place before a permit was issued. Because post-mining development cannot commence until mining and reclamation are completed many years later, applicants could rarely identify a particular project with the specificity required by these regulatory entities. For example, a permit application could not provide the specific design plan, financing commitments and infrastructure needs for a hospital or industrial park 10 years before its construction. Likewise, construction and supply contracts would not be available that far in advance of the commencement of construction. A signed lease or purchase agreement for such facilities is not feasible so far in advance of their construction.

On June 22, 2000, OSM issued its final policy (the “AOC Policy”), which clarifies allowable post-mining land uses and related permitting requirements for mountaintop and steep slope mining operations that will not restore mined lands to approximate original contour.30 In the AOC

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Policy, OSM found that when Congress enacted SMCRA, it chose to allow exceptions from AOC only in situations where beneficial post-mining land uses compensated for the adverse effects of not returning the land to AOC. OSM concluded that the overarching principle in OSM’s regulations for alternative post-mining land use was compensation for the original use that was lost. OSM interprets this compensation principle to impose a higher and better use reclamation standard on mountaintop and steep slope mining operations which involves two corollaries:

1. “[a] postmining land use will not be approved where the use could be achieved without waiving the AOC requirement, except where it is demonstrated that a significant public or economic benefit will be realized therefrom”; and

2. “[w]here an exception or variance from AOC requirement is sought, the postmining land use must always offer a net benefit to the public or the economy.”

According to OSM, an appropriate variance from approximate original contour restoration must offer a substantial economic and public benefit that is also greater than the pre-mining use of the reclaimed land. In other words, the proposed post-mining land use supporting the variance must not only be quantitatively greater but also qualitatively superior to the pre-mining use.

In examining the statutory and regulatory requirements to utilize alternative post-mining land uses for mountaintop mining operations, the AOC Policy suggests that the permit applicant is not necessarily required to supply data that is only specific to that particular project. For example, this guidance document discussed the requirements applicable to the AOC variance for mountaintop mining relating to a proposed public facility.

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31 Id.
32 Id.
34 Id. at 6.
POST-MINING LAND USE DEVELOPMENT

Discussing the criteria necessary to justify a variance from AOC for a public facility, the AOC Policy states:

[30 U.S.C. § 1265(c)(3)(B)(ii); 30 CFR 785.14(c)(1)(iii)(A)] Obtainable according to data regarding expected need and market. Here the regulatory authority should require specific demographic data and a market analysis which demonstrates a need for and the feasibility of a public facility (including recreational facilities) postmining land use. The data and analysis should clearly document such things as a lack of other adequate, and similar public facilities of the proposed type nearby.35

[30 U.S.C. § 1265(c)(3)(B)(iii); 30 CFR 785.14(c)(1)(iii)(C)] Assured of investment in necessary public facilities. Here the regulatory authority should require evidence such as letters, and other supporting documents showing how appropriate local, county, regional, state or Federal agencies intend to develop or support the proposed public facility (including recreational facilities) postmining land use. This would include commitments, where appropriate, related to the development of access roads, structures, and adequate utilities such as water, storm water and sewage control, etc.36

[30 U.S.C. § 1265(c)(3)(B)(v); 30 CFR 785.14(c)(1)(iii)(E)] Practicable with respect to private financial capability for completion of the proposed use. Here, the regulatory authority should require documentation which indicates a reasonable expectation that private financing, if appropriate, of the public facility (including recreational facilities) postmining land use would be available. Such documentation could consist of letters of commitment by interested parties. However, financial contracts, while desirable, would not be necessary to fulfill the intent of this requirement.37

35 Id. at 13.
36 Id. at 14.
37 Id.
This interpretation of the reclamation standards in SMCRA by OSM allows the use of a broader range of information explaining the general need for and feasibility of the planned post-mining land use. Now, instead of identifying a specific occupant for an economic development project, broader market information could be used to justify a particular land use project. Public agencies could submit commitments to support the future infrastructure needs of the project rather than plans and dedicated financing for such infrastructure. Rather than having signed private or public financing commitments in place, a written representation that similar activities had been financed in that region could suffice. This sort of flexibility made the planning of development projects as a part of a reclamation plan to occur several years in the future more realistic.

The AOC Policy also contains multiple references to the desirability of input from and consultation with governmental agencies at the local, county and state levels. Clearly, projects planned with significant input from such agencies are preferred by OSM. So long as an applicant complies with the compensation principle, this AOC Policy signals more flexibility in the implementation of SMCRA’s requirements for exceptions from AOC for alternative post-mining land uses than regulatory agencies had previously allowed.

Government-sponsored economic development programs supply ready-made support for alternative post-mining land uses because they automatically contain most of the elements targeted by the AOC Policy. Development agencies and programs always deal with market data for various uses, economic analysis of the viability of various businesses and potential private and public sources of financing. By their very nature, economic development programs include not only the input of the development agency itself, but also other government programs that might benefit a particular project such as environmental or land use agencies.

§ 9.05. State Governmental Programs Available to Facilitate Post-Mining Land Use Development Projects.

State and local governments in the Appalachian coalfields are beginning to create programs that facilitate economic development projects on reclaimed
surface mine sites. The large, level areas that result from mountaintop and steep slope mining operations are required for such programs due to the mountainous terrain of these areas of Kentucky, Virginia and West Virginia. These states are attempting to maintain and diversify the economies of their coal communities. The increased flexibility in standards for post-mining land uses that qualify for AOC variances suggested by the OSM Policy will support the coordination of such post-mining land uses with state-sponsored development and land use efforts. In addition, such development programs offer two primary components emphasized in the OSM Policy for post-mining land uses with AOC variances: a “higher and better” economic use combined with government input.


Kentucky does not yet have a government agency devoted to the development of reclaimed surface mine sites. However, in its 2010 session, the Kentucky General Assembly enacted House Bill 175, which amended the Kentucky Surface Mine Act to encourage the location of pollinator habitat sites on reclaimed coal mine lands.38 This amendment adds the establishment of pollinator habitat sites for bees as an approved part of the revegetation process that qualifies for post-mining land use plans.


The Virginia Coalfield Economic Development Authority (VCEDA) was created by the Virginia General Assembly in 1988 to address the economic problems of Southwest Virginia.39 The mission of VCEDA is to enhance the economic base for the seven counties and one city in coal producing areas of Virginia (Lee, Wise, Scott, Buchanan, Russell, Tazewell and Dickenson Counties and the City of Norton). The public purpose for its activities is to diversify the economic base of Southwest Virginia and create jobs for its citizens. To do so, the Virginia Coalfield Economic Development Authority


311
is authorized to (i) provide financial support for the purchase of real estate, construction of buildings for sale or lease, and the installation of utilities; (ii) direct loans and grants for private for-profit employers; and (iii) provide grants and other support improvements it deems necessary.40

Although the Virginia Coalfield Economic Development Authority is not empowered to make loans or grants directly to mining related projects, it has promoted economic development projects on reclaimed surface mine sites. For instance, VCEDA has helped to fund the development of the following industrial parks on former surface mine sites: the Dickenson County Technology Park (Dickenson County Center for Education and Research and SI International); the Lonesome Pine Business and Technology Park (Lonesome Pine Technology Center); Southern Gap Park (Sykes); and the Wise County Industrial Park (Wise Shell Building). The post-mining reclamation plan in a mountaintop mining permit could create a site that would be available for the landowner to contribute or sell later for a Virginia Coalfield Economic Development Authority project after bond release.


The West Virginia Office of Coalfield Community Development (WVOCCD) was created by the West Virginia Legislature in 1999 through the Coalfield Community Development Act, W. Va. Code § 5B-2A-1 et seq. (2010)(the “Act”), to promote the economic development of the 30 coal producing counties in West Virginia and to coordinate their economic goals with mining and reclamation operations.41 The WVOCCD is charged with the responsibility to inventory the assets needed by these counties to foster their long-term viability. This agency is also required to collect information from coal operators applying for or renewing surface mining permits in the form of community impact statements and use this information to help coordinate, if possible, the land and infrastructure needs of the communities in the general area with these surface mining operations.42

40 Id.
Inventory Available Assets: A coal operator is required by the Act to submit a community impact statement ("CIS") to the West Virginia Office of Coalfield Community Development within 60 days after it files a surface mining permit application with the West Virginia Department of Environmental Protection (WVDEP). The community impact statement is not intended to be a highly technical document, but rather collects information about the planned mining operation with the primary objective of facilitating future development efforts. Each community impact statement is required to contain the following types of information:

1. "[t]he amount and location of land to be mined";
2. "[t]he expected duration of the surface mining operations";
3. "[t]he extent of anticipated mining-related property acquisitions, to the extent . . . known";
4. "[t]he intentions of surface and mineral owners relative to the acquired property, to the extent . . . known";
5. names and addresses of landowners owning property within 1,000 feet of the permitted area;
6. "[a] statement of the post-mining land use for all land within the permit boundary";
7. "[t]he intended blasting plan and [its] expected time and duration";
8. "the extent and nature of valley fills and the watersheds to be affected";
(9) economic information about the surface mine, such as the number of jobs created, annual coal production and anticipated life of the mine;52

(10) “[a]n acknowledgment of the recommendations of any approved master land use plan that pertains to the land proposed to be mined, including an acknowledgment of the infrastructure components needed to accomplish the designated post-mine land use required by the plan”;53

(11) location and distance from the mine site to the nearest utilities, roads and infrastructure;54

(12) “identification of public bridges, parks and recreation areas, roads, schools, utilities, water supplies or other public facilities that may be acquired, relocated or removed by the . . . surface mining”;55

(13) “identify the public roads over which coal . . . shall be transported . . ., the estimated number of truckloads of coal or refuse materials to be transported daily on these roads, the estimated truck schedule” and anticipated rerouting of traffic;56 and

(14) maps of the area within 1,000 feet of the permitted area depicting permit boundaries, property boundaries, property ownership, structures, roads and other information required by the CIS.57

The operator must also file the community impact statement with the West Virginia Department of Environmental Protection, the county commission, the office of the clerk of the county commission, the regional planning and development offices, the county economic development

54 Id. § 145-8-4.3.j.
55 Id. § 145-8-4.3.k.
56 Id.
57 Id. § 145-8-4.3.l.
authorities, and public libraries in areas that will be affected by mining operations.\footnote{W. Va. § 5B-2A-6(d); W. Va. Code R. § 145-8-4.4.}

\textit{Master Land Use Plans:} The Act requires the county commission or other governing body for each county in which surface mining operations have occurred to determine the land and infrastructure needs within their counties through developing a master land use plan that incorporates post-mining land use needs, including, but not limited to, renewable and alternative energy, residential, highway, industrial, commercial, agricultural, public facility or recreational facility uses.\footnote{W. Va. § 5B-2A-9(f)(1); W. Va. Code R. § 145-8-6.2.} The county commission or other responsible governing body may designate a local, county or regional development authority to assist in preparing a master land use plan. If requested, the West Virginia Office of Coalfield Community Development shall assist these responsible government entities with the development of a master land use plan.\footnote{W. Va. Code §§ 5B-2A-9(f)(1)-(2).}

The Act requires master land use plans to include specific types of infrastructure component standards. The land uses identified within an appropriate plan must comply with these standards to achieve approval. To determine the land and infrastructure needs necessary to prepare a master land use plan, the responsible development authority must at least consider the following:

1. "\[t\]he availability of developable land in the general area";\footnote{W. Va. Code R. § 145-8-5.6.e.1.}
2. "\[t\]he needs of the general area for developable land";\footnote{Id. § 145-8-5.6.e.2.}
3. "\[t\]he availability of infrastructure, including, but not limited to, access roads, water service, wastewater service and other utilities";\footnote{Id. § 145-8-5.6.e.3.}
4. "\[t\]he amount of land to be mined and the amount of valley to be filled".\footnote{Id. § 145-8-5.6.e.4.}
(5) “[t]he amount, nature and cost to develop and maintain the identified community assets”;65
(6) “[t]he availability of federal, state and local grants and low-interest loans to finance all or a portion of the acquisition and construction of the land and infrastructure needs of the general area”;66 and
(7) the location of developable land on or near existing or planned multilane highways.67

Initially, a master land use plan developed for a county must be reviewed and approved by the WVDEP and the West Virginia Office of Coalfield Community Development. Following that initial approval, a master land use plan is subject to review and approval by the WVDEP and WVOCCD once every three years.68 To date, master land use plans have been completed at some level for all of the coal producing counties of West Virginia except Wyoming County.

Securing Developable Land and Infrastructure: The West Virginia Office of Coalfield Community Development may secure developable land and infrastructure for a county development authority or county by the inclusion of a master land use plan in the reclamation plan of a mining permit application prepared by a coal operator under W. Va. Code § 22-3-10 (2010).69 Of course, the landowner’s agreement is essential for this post-mining land use option. The infrastructure component standards required to accomplish the designated post-mining land uses identified in a master land use plan shall be developed by a county or its designated development authority and approved by the relevant county governing body before the county can accept ownership of property donated through the reclamation plan of a mining permit application.70 Property cannot be accepted unless the county or county development authority determines the following:

65 Id. § 145-8-5.6.e.5.
66 Id. § 145-8-5.6.e.6.
69 Id. § 5B-2A-9(f).
70 Id. § 5B-2A-9(f)(4); W. Va. Code R. § 145-8-6.3.a.
[(1)] the property use is compatible with adjacent land uses;
[(2)] the use satisfies the relevant county or development authority’s anticipated need and market use;
[(3)] the property has in place necessary infrastructure components needed to achieve the anticipated use;
[(4)] the use is supported by all other appropriate public agencies;
[(5)] the property is eligible for bond release in accordance with [W. Va. Code § 22-3-23]; and
[(6)] the use is feasible.71

The West Virginia Surface Coal Mining and Reclamation Act, W. Va. Code § 22-3-1 et seq. (2009)(WVSCMRA), allows the incorporation of county-generated master land use plans into the reclamation plans proposed in applications for surface mining permits submitted to the WVDEP. A reclamation plan that includes a master land use plan must justify how the reclaimed land will support the alternative post-mining land use, the relationship of the post-mining land use to existing land use policies, the comments of any surface owner, and the input of any state and local agencies that would have to initiate, implement, approve or authorize the proposed use of the land following reclamation.72 The alternative post-mining land use in any reclamation plan for lands that will be surface mined shall also comport with the land use specified in the master land use plan approved for that area unless the permit applicant demonstrates that:

1. “[t]he proposed alternative post-mining land use is higher and better than the land use specified in the approved master land use plan”;73
2. “[s]ite-specific conditions make attainment of the post-mining land use . . . specified in the approved master land use plan . . . impractical”;74 or

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72 Id. § 22-3-10.
73 Id. § 22-3-10(a)(3)(A)(i).
74 Id. § 22-3-10(a)(3)(A)(ii).
(3) “[t]he post-mining land use specified in the approved master land use plan would substantially interfere with the future extraction of a mineable coal bed.”75

In addition, the reclamation plan requirements in section 10 of the WVSCMRA provide that a post-mining land use in a permit application which complies with a master land use plan for that area satisfies the alternative post-mining land use requirements necessary to receive a variance from approximate original contour for mountaintop mining.76 The use of master land use plans in reclamation plans under WVSCMRA creates a linkage between the surface mine permitting process and the economic development goals of the county in which the mining operation is located. In this way, the WVOCCD directly promotes economic development projects on surface mined lands at the permitting level.

Several post-mining land use projects previously completed on reclaimed surface mined lands in West Virginia could have been a master land use plan project. These include: Harless Wood Products Park, Mingo County, West Virginia; FBI Complex, Harrison County, West Virginia; Logan County Airport, Logan County, West Virginia; Twisted Gun Golf Course, Mingo County, West Virginia; Columbia Wood Products Facility, Nicholas County, West Virginia; YMCA Sports Complex, Raleigh County, West Virginia; and Anker Sports Complex, Monongalia County, West Virginia.

§ 9.06. Federally Sponsored Projects in Partnership with State-Based Economic Development Programs or Post-Mining Land Use.

Federal programs are beginning to provide funding and technical assistance to facilitate state-sponsored efforts for economic redevelopment on surface mined lands. In 2009, the EPA awarded a grant of approximately $600,000 to the Brownfields Program of the West Virginia Water Research Institute at West Virginia University (“Water Research Institute”)77 to

75 Id. § 22-3-10(a)(3)(A)(iii).
76 Id. § 22-3-10(a)(3)(C).
develop a program to create Sustainable Energy Parks (SEP) on surface mine sites in Appalachia. This program will focus on the redevelopment of mine-scarred lands into biomass production and biofuels processing facilities. Other forms of alternative energy generation for the sustainable energy parks will be wind, solar and geothermal sources.

The sustainable energy parks project of the Water Research Institute is intended to plan economically sustainable energy production facilities using the large open areas and infrastructure at former surface mining sites. This program will emphasize the development of either pelletized or liquid fuel sources using three basic approaches: corn-based ethanol, oilseed-based biodiesel or cellulosic ethanol produced from wood waste and switchgrass. It also complies with the strategic objectives of the Appalachian Regional Commission (ARC) to (i) promote the Appalachian Region’s economic competitiveness; and (ii) increase the use of renewable energy resources in Appalachia to produce alternative fuels, electricity and heat.

The ARC also contributed some funds to the sustainable energy parks project at the Water Research Institute. The Water Research Institute’s stated objectives for the sustainable energy parks program are as follows:

1. Identify large tracts of potentially usable mine-scarred land.
2. Develop site selection criteria such as size, infrastructure and proximity to markets.
3. Create a portfolio of candidate sustainable energy parks based on criteria (1) and (2).
4. Develop a prioritization mechanism for sites using the criteria in b. combined with the potential for energy applications, market analysis, economic analysis of usage, environmental assessment, existing community assets, and land ownership.
5. Perform site specific market and environmental studies.
6. Engage in educational and training programs for economic development authorities, local government stakeholders, community organizations, landowners and the public.
7. Develop and release a request for proposal to develop a pilot sustainable energy park facility.
[8] Select one community for development of a comprehensive sustainable energy park.
[9] Create the comprehensive development plan for the pilot program.
[10] Showcase the pilot sustainable energy parks project.78

Comprehensive sustainable energy parks can be used for future surface mine permits as well as abandoned mine lands. Undoubtedly, the inclusion of a sustainable energy park project in a planned post-mining land use would support the “higher and better” standard of SMCRA. Furthermore, the sustainable energy parks program provides the opportunity to partner with coal purchasers, such as utilities, who need to develop green energy components for their electric generation portfolio even at above market prices. Examples of wind power projects that could have anchored a sustainable energy park in West Virginia are the Nedpower Mount Storm Wind Farm located in Grant County, West Virginia, and the Invenergy Beech Ridge Wind Farm located in Greenbrier County, West Virginia.

Another potential development in federal post-mining land uses comes by way of the seemingly unrelated mandate by the United States Department of Defense, which requires the U.S. Army and Air Force National Guard programs to enhance their readiness training facilities. To fulfill this directive, a portion of the improvements will require large, relatively flat areas of cleared land in remote sites for military maneuver and training activities. Mountaintop mining sites in Appalachia provide the sort of terrain that is well-suited for these training uses. The West Virginia Office of Coalfield Community Development has been in discussions with the West Virginia Air Force National Guard to explore the possibility of leasing or acquiring large former surface mine areas for such training facilities.

The West Virginia Office of Coalfield Community Development has also been contacted by the Federal Emergency Management Agency to explore

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the availability and potential acquisition of reclaimed surface mined lands for temporary flood relief housing. The Federal Emergency Management Agency intends to create preexisting sites for flood relief housing on reclaimed mining sites in areas of Appalachia that are chronically impacted by high water events.

The Appalachian Regional Commission (ARC) is a federal economic development agency that represents a partnership of federal, state and local governments. The ARC provides funding for several hundred projects in the Appalachian Region, in areas such as business development, education and job training, telecommunications, infrastructure, community development, housing and transportation. The ARC specifically targets economic development and renewable energy projects that could be partnered with alternative post-mining land uses on mountaintop mining sites.

§ 9.07. Conclusion.

Future post-mining land uses for large scale surface mine operations with variances from approximate original contour reclamation requirements will have a much greater possibility of approval by regulatory agencies through coordination with long-term economic and community redevelopment in the Appalachian Region. These goals can be achieved through the creation of broad-based land use development organizations that are connected to the mine permitting process such as the West Virginia Office of Coalfield Community Development. More focused government-sponsored programs like the sustainable energy parks project of the Water Research Institute can also be used to justify the variances from AOC necessary for mountaintop projects. Both approaches offer the potential to utilize governmental initiatives that emphasize economic diversification and redevelopment in Appalachia to support ongoing surface mining operations.
