DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Part 948

[WV–094–FOR]

West Virginia Regulatory Program

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSM), Interior.

ACTION: Final rule; approval of amendment.

SUMMARY: We are announcing our decision to approve an amendment and to remove required program amendments on the West Virginia surface coal mining regulatory program (the West Virginia program) under the Surface Mining Control and Reclamation Act of 1977 (SMCRA or the Act). The amendment we are approving concerns the deletion of a State provision that imposed a regulatory limitation on expenditure of funds for water treatment at bond forfeiture sites. The required program amendments we are removing concern the regulatory limitation on expenditure of funds for water treatment, and the effectiveness of West Virginia's alternative bonding system (ABS) in providing sufficient funds to complete reclamation, including water treatment, at all existing and future bond forfeiture sites.

EFFECTIVE DATE: May 29, 2002.

FOR FURTHER INFORMATION CONTACT: Mr. Roger W. Calhoun, Director, Charleston Field Office, 1027 Virginia Street East, Charleston, West Virginia 25301. Telephone: (304) 347–7158.

SUPPLEMENTARY INFORMATION:

I. Background on the West Virginia Program

Section 503(a) of the Act permits a State to assume primacy for the regulation of surface coal mining and reclamation operations on non-Federal and non-Indian lands within its borders by demonstrating that its program includes, among other things, ''* * * a State law which provides for the regulation of surface coal mining and reclamation operations in accordance with the requirements of the Act* * *; and rules and regulations consistent with regulations issued by the Secretary pursuant to the Act.'' See 30 U.S.C. 1253(a)(1) and (7). On the basis of these criteria, the Secretary of the Interior conditionally approved the West Virginia program on January 21, 1981. You can find background information on the West Virginia program, including the Secretary's findings, the disposition of comments, and conditions of approval of the West Virginia program in the January 21, 1981, **Federal Register** (46 FR 5915). You can also find later actions concerning West Virginia's program and program amendments at 30 CFR 948.10, 948.12, 948.13, 948.15, and 948.16.

II. Background on West Virginia's ABS

On January 21, 1981, the Secretary conditionally approved West Virginia's ABS. The ABS has two basic components: the site-specific or incremental bond posted by the permittee and the Special Reclamation Fund (the Fund), comprised of a special reclamation tax, civil penalty assessments, and interest earned on the revenues, which is intended to cover any reclamation costs in excess of the site-specific or incremental bond.

At the time of approval, the Secretary required that the State provide an actuarial study of the Fund demonstrating that the amount of money going into the Fund would cover the demands to be placed upon it, along with any program changes needed to redress any deficiencies identified by the actuarial study (46 FR 5956).

The State submitted an actuarial study on October 29, 1982 (Administrative Record Number WV–456). The study concluded that the Fund was solvent, in part, because it contained a funding mechanism (the special reclamation tax) to provide for the cost of future reclamation. On March 1, 1983 (41 FR 8447), we subsequently found that the State's alternative bonding provisions were in accordance with section 509(c) of SMCRA and the Federal criteria for approval of alternative bonding systems at 30 CFR 806.11(b), which has since been recodified as 30 CFR 800.11(e). Consequently, we removed the condition (25) relating to our approval of the State's ABS.

By 1988–89, our oversight evaluations indicated that the Fund lacked sufficient revenue to reclaim all outstanding bond forfeiture sites. In addition, the cash balance in the Fund ceased earning interest because of losses suffered by the State's Consolidated Investment Fund. On October 1, 1991, we notified the State, pursuant to 30 CFR 732.17(c) and (e), that a program amendment was necessary, because the Fund no longer met the requirements of 30 CFR 800.11(e).

In a series of amendments beginning in 1993, West Virginia revised portions of its permanent regulatory program in an attempt to resolve some of our concerns. For example, the State increased its special reclamation tax from one cent to three cents per ton of coal mined and adopted site-specific bonding regulations. In addition, Deloitte and Touche, an accounting and consulting company, completed an actuarial study of the Fund in March 1993. The study concluded that the Fund had an accrual deficit position as of June 30, 1992, but that the Fund would realize gradual improvement over the next five years.

On October 4, 1995 (60 FR 51900), we announced our partial approval of the State's amendments. However, as specified in 30 CFR 948.16 (jjj), (kkk), and (lll), we also required the State to amend certain statutory provisions to fully eliminate the deficit in the Fund and to complete reclamation, including treatment of pollutional discharges, at all bond forfeiture sites.

OSM and the State conducted additional studies that were completed in September 1997 and June 1999 to assess the financial condition of the Fund. The studies found that the Fund could eventually be solvent if its responsibilities were limited to land reclamation. However, the studies also determined that treatment of pollutional discharges from forfeited sites required additional revenue.

By letter dated September 29, 2000, we informed the West Virginia Department of Environmental Protection (WVDEP) that Federal corrective action would be taken, unless the West Virginia Legislature (Legislature) adopted the necessary changes to the Fund to resolve the identified deficiencies (Administrative Record Number WV–1181). However, the Legislature adjourned on April 14, 2001, without enacting the proposed changes.

On April 18, 2001, WVDEP requested additional time to develop and obtain approval of statutory and regulatory changes to the State's bonding provisions (Administrative Record Number WV–1206). In addition, WVDEP requested that we conduct an informal review of a report entitled ''The Mountain State Clean Water Trust Fund.'' Under a plan that was based on the report, WVDEP intended to bifurcate the Fund into two distinct accounts, one for land reclamation and one for water treatment.

In a letter dated June 29, 2001, we initiated corrective action under 30 CFR 733.12(b). In that letter, which is known

as a Part 733 notification, we notified the State that it must initiate certain remedial measures by July 27, 2001, to satisfy the outstanding required amendments at 30 CFR 948.16 (kkk), (jjj) and (lll) and that it must submit the necessary, fully-enacted and adopted statutory and regulatory revisions no later than 45 days after the end of the 2002 regular session of the Legislature (Administrative Record Number WV–1218). As stated in the letter, if West Virginia failed to take these measures, we intended to recommend that the Secretary partially withdraw approval of the State program and implement a partial Federal regulatory program.

By e-mail message dated August 8, 2001, WVDEP provided us with additional draft legislative changes for informal review (Administrative Record Number WV–1233A). The proposed revisions are commonly called the 7-Up Plan.

On August 9 and August 28, 2001, we provided WVDEP our informal review of the proposed statutory revisions that were submitted on August 8 (Administrative Record Nos. WV–1233 and WV–1235). Under the draft legislation, the special reclamation tax would be increased from 3 cents to 14 cents per ton of clean coal mined for 39 months and reduced to 7 cents thereafter with biennial review by an advisory council.

By letter dated August 13, 2001, WVDEP provided us with a schedule for submitting statutory and regulatory revisions to the Legislature in response to our Part 733 notification (Administrative Record Number WV–1234). The letter specified that the State would formally submit the program amendment to us by April 30, 2002. The letter also indicated that the statutory changes could be presented to a special session of the Legislature before that date.

We released our analysis of the State's draft legislation on September 7, 2001 (Administrative Record Number WV–1236). In that report, we concluded that the proposal would generate sufficient revenues for about 9 years, but future adjustments would have to be made to meet long-term needs of the Fund.

On September 15, 2001, a special session of the Legislature passed Senate Bill 5003, which is intended to eliminate the deficit in the Fund and provide for reclamation, including water treatment, at bond forfeiture sites. The Governor of West Virginia (Governor) signed Enrolled Senate Bill 5003 on October 4, 2001. The effective date of the bill is October 4, 2001, but none of the provisions could be implemented without OSM approval.

III. Submission of the Amendment

By letter dated September 24, 2001 (Administrative Record Number WV–1238), WVDEP formally submitted a proposed amendment to the West Virginia program consisting of revisions to the West Virginia Code (W. Va. Code), as amended by Enrolled Senate Bill 5003. The amendment added W. Va. Code section 22–1–17, which established the Special Reclamation Fund Advisory Council (Advisory Council). The amendment also revised W. Va. Code 22–3–11 by increasing the special reclamation tax rate and revised W. Va. Code 22–3–12 by deleting certain site-specific bonding provisions.

We announced receipt of the proposed amendment on October 24, 2001 (66 FR 53749). In the same document, we opened the public comment period and provided an opportunity for a public hearing or meeting on the adequacy of the amendment (Administrative Record Number WV–1243). The public comment period closed on November 23, 2001. We received comments from one environmental organization, a consultant to the environmental organization, one industry group, and two Federal agencies.

By letter dated November 6, 2001, the West Virginia Highlands Conservancy (WVHC) requested that the comment period on the amendment be extended through December 14, 2001 (Administrative Record Number WV–1245). On November 9, 2001, we denied the request (Administrative Record Number WV–1246). We denied the request for an extension because an extension would have delayed our decision, which could have resulted in a loss of revenues that are badly needed by the State for reclamation of bond forfeiture sites. The proposed amendments that we later approved increased the tonnage tax on clean coal mined that provides revenues to the Fund. The tax increase was scheduled to go into effect on January 1, 2002, but only if OSM approved the tax increase by that date. W. Va. Code 22–3–11(h), (n). Nevertheless, we agreed with WVHC's contention that the complexity of the questions raised by the amendment itself, and by comments submitted by WVHC and others, created the need for a longer comment period on the question of whether the amendments were sufficient to remedy the State's bonding program deficiencies on a long-term basis. Therefore, we elected to bifurcate our approval process for these amendments as follows.

First, we published in the **Federal Register**, on December 28, 2001, our approval of the amendment submitted on September 24, 2001, because it afforded immediate improvement in the State's existing, approved ABS. 66 FR 67446. We also required that the State remove the regulatory limitation on expenditure of funds for water treatment at bond forfeiture sites (Administrative Record Number WV–1259).

Next, we announced a 90-day comment period in the **Federal Register** on December 28, 2001, which also provided an opportunity for a hearing or meeting, on the issue of whether the amendments that we approved satisfy the required amendment at 30 CFR 948.16(lll) (Administrative Record Number WV–1262). 66 FR 67455. 30 CFR 948.16(lll) requires that the State ''eliminate the deficit in [its] * * * alternative bonding system and * * * ensure that sufficient money will be available to complete reclamation, including the treatment of polluted water, at all existing and future bond forfeiture sites.'' No one requested a hearing or meeting, so we did not hold one. The public comment period closed on March 28, 2001. During the reopening of the comment period, we received comments from one private citizen, one environmental group, one consultant, and one industry group.

We are also including in this **Federal Register** document our decision on the State's response to the required program amendment codified at 30 CFR 948.16(jjj) that was submitted to us as part of a separate program amendment package dated April 9, 2002 (Administrative Record Number WV-1296A). We will address the remainder of the April 9, 2002, amendment in a separate final rule document at a later date. A notice (67 FR 30336) announcing receipt and a 15-day public comment period on the program amendment that addressed the required amendment at 30 CFR 948.16(jjj) was published in the **Federal Register** on May 6, 2002 (Administrative Record Number WV–1303). The public comment period closed on May 21, 2002. We received comments from one industry group and two Federal agencies.

IV. OSM's Findings

For the reasons discussed below, we are removing the required program amendments codified at 30 CFR 948.16(jjj) and (lll).

In our June 29, 2001, 30 CFR part 733 notification, we stated that West Virginia must initiate certain remedial measures to satisfy the outstanding required amendments at 30 CFR 948.16(jjj), (kkk), and (lll), and that the State must submit the necessary, fully

enacted and adopted statutory and regulatory revisions (Administrative Record Number WV–1218). As we announced in the December 28, 2001, **Federal Register**, the required program amendment at 30 CFR 948.16(kkk) was previously satisfied and, therefore, removed (66 FR 67446, 67450).

We will discuss below how the State revised the West Virginia program to address the required program amendments codified at 30 CFR 948.16(jjj) and (lll).

1. Required Program Amendment at 30 CFR 948.16(jjj)

As of June 29, 2001, the date of our Part 733 notification to the State, this required amendment read as follows:

> 30 CFR 948.16(jjj)—West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to revise section 22–3–11(g) of the Code of West Virginia and section 38–2–12.5(d) of the West Virginia Code of State Regulations to remove the limitation on the expenditure of funds for water treatment or to otherwise provide for the treatment of polluted water discharged from all bond forfeiture sites.

In response to this required program amendment, WVDEP submitted a program amendment by letter dated September 24, 2001, containing Enrolled Senate Bill 5003 (Administrative Record Number 1238). In that amendment, the State revised W. Va. Code 22–3–11(g) by deleting language that limited expenditures from the Fund for water treatment purposes to 25 percent of the Fund's gross revenues. As amended, W. Va. Code 22–3–11(g) provides, in part, that the Secretary of WVDEP may use the Fund for the purpose of designing, constructing and maintaining water treatment systems where they are required for complete reclamation of the affected lands.

On December 28, 2001, we found that the deletion of the 25-percent limitation at W. Va. Code 22–3–11(g) partially satisfied the requirement codified at 30 CFR 948.16(jjj) (66 FR 67446, 67449). To fully satisfy this required amendment, the State also needed to delete the 25-percent limitation in its Code of State Regulations (CSR) at 38–2–12.5(d). In addition, revised W. Va. Code 22–3–11(g) continued to provide that the Secretary of WVDEP ''may'' rather than ''shall,'' use the Fund for the purpose of designing, constructing and maintaining water treatment systems. Therefore, we revised 30 CFR 948.16(jjj) to reflect the statutory changes and to require the State to specify that the Fund must be used, where needed, to pay for water treatment on bond forfeiture sites. As revised on December 28, 2001, the required amendment at 30 CFR 948.16(jjj) reads as follows:

> 30 CFR 948.16(jjj)—West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to revise CSR 38–2–12.5(d) to remove the 25-percent limitation on the expenditure of funds for water treatment or to otherwise provide for the treatment of polluted water discharged from all bond forfeiture sites. In addition, the State must amend its program to specify that moneys from the Special Reclamation Fund must be used, where needed, to pay for water treatment on bond forfeiture sites.

By letter dated February 26, 2002, WVDEP sent us a status report regarding its efforts to satisfy various required program amendments codified at 30 CFR 948.16 (Administrative Record Number WV–1276). In that letter, WVDEP stated that it had submitted proposed legislation to the Legislature to amend subsection CSR 38–2–12.5(d) to remove the 25-percent limitation on the expenditure of funds for water treatment.

However, WVDEP declined to change ''may'' to ''shall'' in W. Va. Code 22–3–11(g). According to WVDEP, making that change could remove the State's discretion to determine the appropriate forms of reclamation it could use by specifically mandating water treatment to the exclusion of land reclamation.

When we revised 30 CFR 948.16(jjj) on December 28, 2001, we did not intend to require that water treatment be the exclusive means of correcting pollutional discharges on bond forfeiture sites. We acknowledge that other methods, such as land reclamation, might also be effective. Nor did we intend to require that monies from the Fund be spent to treat pollutional discharges regardless of whether there are other more beneficial and cost-effective means of abating or eliminating the pollutional discharge. Rather, we intended to require that the State clarify that the use of monies from the Fund for treatment of pollutional discharges on bond forfeiture sites, where needed, is mandatory.

While the word ''may'' was not removed from the West Virginia program, the West Virginia Supreme Court of Appeals has determined that the WVDEP has a mandatory duty to use bond moneys for acid mine drainage treatment. *State ex rel. Laurel Mountain* v. *Callaghan,* 418 S.E.2d 580 (1990). Moreover, in a subsequent decision, the Court held that W. Va. Code 22A–3–11(g), now codified as 22–3–11(g), imposes upon the WVDEP ''a mandatory, nondiscretionary duty to utilize moneys from the SRF [Special Reclamation Fund] * * *, to treat AMD [acid mine drainage] at bond forfeiture sites when the proceeds of the forfeited bonds are less than the actual cost of reclamation.'' *State ex rel. West Virginia Highlands Conservancy, Inc.* v. *West Virginia DEP,* 447 S.E.2d 920, 925 (1994).

In addition, current West Virginia program regulations at CSR 38–2–12.4.d. state that:

> Where the proceeds of bond forfeiture are less than the actual cost of reclamation, the Secretary shall make expenditures from the special reclamation fund to complete reclamation. The Secretary shall take the most effective actions possible to remediate acid mine drainage, including chemical treatment where appropriate, with the resources available. (Emphasis added)

Moreover, the State defines ''completion of reclamation'' to mean, among other things, ''that all applicable effluent and applicable water quality standards are met * * *'' CSR 38–2–2.37. Hence, the State's program contains a mandatory requirement that Fund monies be used, where needed, for acid mine drainage treatment.

In view of the litigation and the regulations discussed above, we conclude that the part of the required amendment at 30 CFR 948.16(jjj) that concerns use of moneys from the Fund for water treatment on bond forfeiture sites is no longer needed and can be removed.

The other portion of the required amendment concerns the 25-percent limitation in the State's regulations. By letter dated April 9, 2002 (Administrative Record Number WV–1296A), West Virginia sent us a proposed amendment that revised CSR 38–2–12.5.d. by deleting the 25-percent limitation on expenditures from the Fund for water quality enhancement projects. The Legislature adopted this revision on March 9, 2002, as part of the Enrolled Committee Substitute for House Bill 4163, which the Governor signed into law on April 3, 2002.

The specific language that the State deleted read as follows:

> Expenditures from the special reclamation fund for water quality enhancement projects shall not exceed twenty-five percent (25%) of the funds gross annual revenue as provided in subsection g, section 11 of the [West Virginia] Act.

As amended, CSR 38–2–12.5.d. reads as follows:

> 12.5.d. In selecting such sites for water quality improvement projects, the Secretary shall determine the appropriate treatment techniques to be applied to the site. The selection process shall take into

consideration the relative benefits and costs of the projects.

We find that the amendment to CSR 38–2–12.5.d. satisfies the part of the required amendment at 30 CFR 948.16(jjj) that concerns the deletion of the 25-percent limitation from the State rules. Therefore, we find that 30 CFR 948.16(jjj) has been fully satisfied and can be removed.

2. Required Program Amendment at 30 CFR 948.16(lll)

This required amendment reads as follows.

> 30 CFR 948.16(lll)—West Virginia must submit either a proposed amendment or a description of an amendment to be proposed, together with a timetable for adoption, to eliminate the deficit in the State's alternative bonding system and to ensure that sufficient money will be available to complete reclamation, including the treatment of polluted water, at all existing and future bond forfeiture sites.

In essence, it requires that West Virginia modify its ABS to (A) eliminate the deficit and (B) ensure that sufficient money will be available to complete land and water reclamation on all existing and future bond forfeiture sites. This requirement corresponds to 30 CFR 800.11(e)(1), which provides that alternative bonding systems must ''assure that the regulatory authority will have available sufficient money to complete the reclamation plan for any areas which may be in default at any time.''

A. Elimination of the Deficit

Special Reclamation Tax Rate Increase. On December 28, 2001, we approved an amendment to W. Va. Code 22–3–11(h) that increased the special reclamation tax rate from 3 cents per ton of clean coal mined to 7 cents per ton of clean coal mined. This subsection also levies an additional temporary tax of 7 cents per ton of clean coal mined for a period not to exceed 39 months. Collection of both taxes began on January 1, 2002. At the current coal production rate in West Virginia, these tax rate increases will increase cash flow into the Fund by about $1.8 million per month. According to WVDEP, the Fund had a deficit of approximately $47.9 million in December 2001. Therefore, the deficit in the Fund should be eliminated in about three years.

Prohibition to Reduce Reclamation Tax Rate. On December 28, 2001, we approved an amendment to W. Va. Code 22–3–11(h) that provides that the 7-cent permanent tax rate may not be reduced until the Fund has sufficient moneys to meet the State's reclamation responsibilities under W. Va. Code 22–3–11. This provision provides a safeguard to prevent a premature reduction in the 7 cents per ton permanent tax rate.

Special Reclamation Fund Advisory Council. On December 28, 2001, we approved new W. Va. Code 22–1–17, which created the Special Reclamation Fund Advisory Council (Advisory Council) to ensure ''the effective, efficient and financially stable operation of the special reclamation fund.'' One of the main tasks of the Advisory Council is the elimination of the ABS deficit. It must also ensure that the Fund remains solvent once the deficit is eliminated.

The Advisory Council will have eight appointed members representing multiple interests in the State, including the Secretary of WVDEP, the State Treasurer, the Director of the National Mine Land Reclamation Center, the coal industry, an actuary or an economist, the environmental community, coal miners and the general public.

By letters dated March 29, 2002 (Administrative Record Number WV–1298), WVDEP asked for nominations of people to serve on the Advisory Council. The letters were sent to various groups with an actual or potential interest in the solvency of West Virginia's ABS. After the initial appointments, subsequent members will serve a full six-year term. The initial terms of all members will begin on July 1, 2002 (W. Va. Code 22–1–17(c)).

The Advisory Council has the following specific duties:

1. Study the effectiveness, efficiency and financial stability of the Fund, and develop a financial process that ensures the long-term stability of the special reclamation program;
2. Identify and define problems associated with the Fund;
3. Evaluate bond forfeiture collection and reclamation efforts;
4. Provide a forum to discuss issues relating to the Fund;
5. Contract with a qualified actuary to determine the Fund's fiscal soundness; and
6. Study and recommend to the Legislature and the Governor alternative approaches to the current funding scheme.

To accomplish these mandates, we anticipate that the Advisory Council will analyze data provided by WVDEP and others; monitor current income and expenditures from the Fund; review and evaluate WVDEP's estimates of future reclamation costs and water treatment obligations; consider alternative means of financing the Fund's reclamation responsibilities so as not to make it entirely dependent upon a coal production tax; project revenues; and consider the findings of the actuary and other experts regarding the fiscal soundness of the Fund.

Annual Reports to the Legislature and the Governor. As provided by W. Va. Code 22–1–17(g), the Advisory Council must report annually to the Legislature and the Governor on the adequacy of the special reclamation tax and the fiscal condition of the Fund. At a minimum, the report must contain—

> a recommendation as to whether or not any adjustments to the special reclamation tax should be made considering the cost, timeliness and adequacy of bond forfeiture reclamation, including treatment.

To prepare this report, the Advisory Council will have to study the effectiveness of the tax rate to eliminate the deficit of the Fund. To do so, the Advisory Council will have to determine current and anticipated bond forfeiture reclamation obligations, including water treatment.

As noted by some commenters, we recognize that there are inaccuracies and gaps in the data currently available. We are continually revising our acid mine drainage (AMD) inventories. For example, we do not know how many bond forfeiture sites with pollutional discharges will require perpetual water treatment. Projected treatment costs at this time are gross estimates based on water treatment models, rather than individual site-specific designs of treatment systems. Until more and better information is obtained on each site, the number of discharges requiring treatment and the kinds of treatment systems required to abate the pollution will be in a state of flux. To the extent that resources allow, we intend to work with WVDEP to assist the Advisory Council in obtaining the data it will need to do its job.

It would be ideal if the State could provide sufficient revenue to immediately eliminate the deficit. It would also be ideal if necessary land reclamation and water treatment projects at bond forfeiture sites could be completed immediately. However, such immediate financial relief may have required the State to obtain monies from the State's general revenue fund. To avoid placing any financial burden on the public for these reclamation obligations, the State chose to make adjustments in the special reclamation tax assessed against the coal industry. In addition, logistical and contractual limitations mean that it would not be possible to immediately reclaim all the land that needs to be reclaimed and treat all the water that needs to be treated. To accomplish the necessary

land reclamation and water treatment, the State will need time to develop specifications, bid and award contracts, secure necessary easements and permits, and design and construct needed treatment facilities.

With the adoption of special reclamation tax rate increases and the creation of the Advisory Council, West Virginia has created a fiscally sound mechanism to eliminate the deficit in the Fund within a reasonable period of time. Therefore, we find that West Virginia has satisfied the first part of the required program amendment codified at 30 CFR 948.16(lll).

B. Ensure Sufficient Money Will Be Available To Complete Existing and Future Bond Forfeiture Reclamation

At 30 CFR 948.16(lll), we also required that West Virginia improve its ABS to ensure that sufficient money will be available to complete land and water reclamation at existing and future bond forfeiture sites, a requirement that parallels the criterion for approval of an ABS under 30 CFR 800.11(e)(1).

As discussed above, the current deficit in the ABS should be eliminated in about three years. If current estimates of the Fund's deficit are in error, the Advisory Council must recommend changes to the Legislature and the Governor to assure that the deficit is eliminated in a timely manner.

With respect to future reclamation obligations, the Advisory Council has an obligation under State law to monitor the Fund, address funding-related issues, and recommend measures to ensure the long-term solvency of the Fund. Specifically, W. Va. Code 22–1–17(f)(1) provides that the Advisory Council must study the effectiveness, efficiency and financial stability of the Fund with an emphasis on ''development of a financial process that ensures the long-term stability of the special reclamation program.''

In addition, W. Va. Code 22–1–17(f)(6) provides that the Advisory Council must ''[s]tudy and recommend to the Legislature alternative approaches to the current funding scheme of the special reclamation fund, considering revisions which will assure future proper reclamation of all mine sites and continued financial viability of the state's coal industry.'' We interpret this provision as meaning that, instead of relying solely on a coal production tax, the Advisory Council must examine and recommend other funding mechanisms such as a sinking fund, insurance, trust fund, or escrow accounts to meet future bond forfeiture reclamation obligations.

With the establishment of the Advisory Council and the requirement that the Council make recommendations to the Legislature and the Governor on appropriate methods of financing existing and future ABS reclamation obligations, West Virginia has created a mechanism whereby the State has the capability to maintain its ABS in a manner consistent with 30 CFR 800.11(e)(1). Therefore, we find that West Virginia has satisfied the required program amendment codified at 30 CFR 948.16(lll). However, we recognize that the mechanism adopted by the State does not ensure implementation of the Advisory Council's recommendations, which must be approved by the Legislature and the Governor before they can take effect. In the event that the Legislature and the Governor do not approve the Council's recommendations, we will reevaluate the adequacy of the State's ABS and, if appropriate, provide notification to West Virginia under 30 CFR 732.17(c) and (e) that it must amend its program to restore consistency with Federal requirements. With this caveat, we are removing the required amendment at 30 CFR 948.16(lll).

V. Summary and Disposition of Comments

Public Comments

In response to our request for comments from the public on the proposed amendment (see Section III of this preamble), we received comments from the WVHC; Morgan Worldwide Mining Consultants, Inc. (Morgan Consultants), a consultant for the WVHC; the West Virginia Coal Association, Inc. (WV Coal Association) and Working On People's Environmental Concerns (WOPEC), an environmental consultant. Our summary and disposition of those comments appear below.

1. Advisory Council

WVHC expressed doubts as to the constitutionality of the Advisory Council established by the legislation, stating that the council appears to violate provisions of the West Virginia Constitution relating to separation of powers. According to WVHC, in devising the council, the Legislature gave itself the power to appoint members to what is essentially an executive body and limited the Governor to approving council members proposed by outside entities. WVHC also expressed concern regarding possible bias within the council, stating that the makeup and appointment scheme associated with the council will no doubt be skewed in favor of industry.

As a Federal agency, we have no authority to evaluate issues relating to interpretation of the West Virginia Constitution. Unless and until the State courts rule otherwise, we must and will presume that legislation adopted by the Legislature and signed by the Governor meets all State constitutional requirements. However, the Advisory Council, which is a multi-interest board, is not much different from other multi-interest boards in West Virginia. The members are appointed by the Governor with the advice and consent of the Senate. All West Virginia advisory boards that we are aware of are created the same way. The various interest groups identified in the statute merely nominate potential members. Only two of the eight members of the Advisory Council must represent the coal industry.

WVHC stated that OSM may not approve a potentially inadequate proposal by delegating responsibility for any necessary future revenue adjustments to an advisory council. According to WVHC, we may only approve an ABS that is fully sufficient, at the time of approval, to cover all potential defaults.

We disagree with these assertions. We believe that as long as the amendment provides a mechanism for remedying ABS inadequacies in a reasonable fashion, we can approve it as being consistent with 30 CFR 800.11(e), which establishes the criteria for approval of alternative bonding systems. 30 CFR 800.11(e)(1) provides that the ABS ''must assure that the regulatory authority will have available sufficient money to complete the reclamation plan for any areas which may be in default at any time.'' The commenter asserts that monies must be made available immediately to cover all potential defaults. We believe that it is not reasonable, because there is currently no way to immediately predict with certainty future bond forfeitures and future water treatment obligations. 30 CFR 800.11(e)(1) requires that sufficient money ''be available,'' but it does not specify that the money must be immediately available. As we stated in Finding 2, it would be ideal if the State could provide sufficient revenue to immediately eliminate the deficit in the Fund and cover all potential defaults. However, even if the necessary funds *were* immediately available, it would not be possible to reclaim immediately all the land that needs to be reclaimed and treat all the water that needs to be treated due to manpower, logistics, planning and contractual limitations. To accomplish the necessary land reclamation and water treatment, the

State will need time to bid and award contracts, secure necessary easements and permits, design and construct needed treatment facilities.

The increased special reclamation tax rate will be sufficient to eliminate the Fund deficit in about three years. We believe that is a realistic time frame, given the limitations discussed above. The legislation also requires the Advisory Council to develop recommendations for the Legislature and the Governor on ways to ensure that the Fund remains solvent on a permanent basis. As noted in Finding 2, we found that arrangement to be a satisfactory method of meeting the criteria in 30 CFR 800.11(e)(1). If the Legislature or the Governor fail to adopt or implement the Advisory Council's recommendations, we will take action under 30 CFR 732.17(c) and (e), if appropriate.

2. Future Water Treatment Cost Estimates

WVHC stated that our September 7, 2001, analysis is faulty, and that the legislative changes will not eliminate the ABS deficit. WVHC asserted that our analysis is not a substitute for an objective, professional, and rigorous actuarial analysis. WVHC asserted that because the recently approved amendments to the Fund do not require an actuarial study until December 31, 2004, the WVDEP has no idea what its true liabilities are and that there is no rational basis for concluding that the proposed tax increases are sufficient to satisfy liabilities.

WVHC stated that, even if OSM's analysis is accurate, that report concludes that the proposed amendments would only result in a positive Fund balance for about nine years. After that time, the Fund would be in deficit every subsequent year. Therefore, WVHC argued, the amendments fail to meet the standard in 30 CFR 800.11(e)(1), which requires that the ABS have ''sufficient money to complete the reclamation plan for any areas which may be in default at any time.''

Our September 7, 2001, analysis represents a best estimate at the time, given the data provided by WVDEP. Since that analysis, WVDEP has continued to improve the quantity and quality of its data on current costs and estimates of future bond forfeiture land and water reclamation costs. Consequently, WVDEP's analysis, as well as our understanding of the Fund and its ability to meet bond forfeiture obligations, is improving. Estimating bond forfeiture rates and long-term water treatment obligations is a very speculative endeavor.

We agree with the commenter that our September 7, 2001, analysis is not a substitute for an objective, professional, and rigorous actuarial analysis of the Fund and its reclamation obligations and costs. The legislation requires that the Advisory Council contract for an actuarial analysis on a regular basis, with the first to be completed by December 31, 2004. That due date coincides with the approximate time that our estimates indicate that the Fund's deficit will be eliminated by the recent increases in the special reclamation tax rate. Therefore, the first determination from the professional actuary will be timely from the perspective of assuring that the Fund's deficit is fully eliminated because that determination will provide the Advisory Council with the information it needs concerning recommending measures to ensure its complete elimination.

With respect to the future, the legislation created the Advisory Council to study the issue, monitor the Fund, and develop recommendations to ensure long-term solvency. As discussed in Finding 2, we believe that the legislation thus establishes a mechanism whereby the Fund can meet the criteria of 30 CFR 800.11(e)(1).

Our responses to specific comments follow.

a. Actuarial Analysis of the Fund

WVHC stated that a proper actuarial analysis of the Fund has never been done, and that a preliminary study done in 1982 was inadequate.

We disagree with this comment. The State submitted an actuarial study on October 29, 1982, and Deloitte and Touche completed an actuarial study of the Fund in March 1993. The 1982 actuarial study found that the Fund was solvent, because it contained a funding mechanism (the special reclamation tax) to provide for the cost of future reclamation. OSM subsequently found the State's ABS provisions to be in accordance with section 509(c) of SMCRA and the Federal regulations. The Deloitte and Touche study concluded that the Fund had an accrual deficit position as of June 30, 1992, but that the Fund would realize gradual improvement over the next five years. Unfortunately, that study proved to be wrong.

b. Estimate of Fund Liabilities.

WV Coal Association stated that our September 7, 2001, analysis grossly overestimated the liabilities associated with the Fund. However, WVHC asserted that WV Coal Association produced no documents in several areas where WV Coal Association claimed that OSM overestimated costs. Thus, WVHC argues, many of WV Coal Association's assertions are unsupported by any documents or written analysis and appear to be nothing more than speculation.

We see no need to determine whether either commenter is correct. The legislation adopted in 2001 provides a means for further study of the issue and adjustments, as appropriate.

c. Estimated Annual Water Treatment Cost Increase.

WVHC stated that our September 7, 2001, analysis is faulty because we projected that costs for water treatment would increase $230,000 per year rather than $2.462 million per year as top WVDEP officials indicated.

Further, WVHC stated that WVDEP's annual costs at just five sites increased from $0.29 million in FY 1985–86 to $3.72 million in FY 1999–2000. This is an increase of $3.43 million in fourteen years, or about $245,000 per year. Thus, the WVHC claims that the increased costs at these five sites by themselves exceed OSM's estimate, without even considering the additional treatment costs at future forfeited sites.

WV Coal Association stated that it believes OSM's $230,000 estimate is the best estimate since it is based on 20 years of mining activity.

We discussed annual treatment costs with WVDEP officials when preparing our analysis of the 7-Up Plan and had an understanding that the $2.462 million was an annual estimated cost repeated every year at the same rate, rather than a cumulative cost to be added each year. To assume the latter would be to assume that almost all permits where acid mine drainage is being treated, would be forfeited. We do not believe that assumption to be a reasonable expectation. Rather than using a one-time $2.462 million cost, we based our estimate of future costs on known historical costs. Over the past 20 years, the State has forfeited bonds where water treatment, if it were to occur, would cost approximately $4.6 million over the 20-year period. This equates to $230,000 per year. We are not certain that the WVHC estimate of a $245,000 increase in cost per year is supported by facts related only to water treatment. However, our calculations were based only on data concerning water treatment. The $230,000 is a 20-year average, but there could have been spikes in costs during some years.

WVHC also stated that, even if we were correct in assuming that water treatment liability would increase by

$230,000 per year, our spreadsheet does not apply that assumption. Instead, the commenter stated, we only increased the water treatment liability figure by $230,000 in three years— 2002, 2003 and 2004.

In response, we agree that we had made this inadvertent programming error. However, even with this correction, our basic conclusion remains the same. The Fund will eliminate the deficit and retain a positive balance for a few years. We agree that a more thorough analysis is necessary to estimate costs and make long-term predictions, which is exactly what the new Advisory Council has been charged to do.

d. Trend in Number of Permits That Produce Acid Mine Drainage (AMD)

WVHC stated that we were mistaken when we stated, on page 3 of our September 7, 2001, analysis, that ''there has actually been a downward trend in the number of new permits issued that have generated water pollution over at least the last ten years (Appendix IV).'' The trend, the WVHC stated, is one of increasing numbers of active sites with AMD discharges and declining assignment of those sites to the bond-forfeiture column. According to the WVHC, this creates a huge potential liability that is much worse now than it was in 1982. In addition, the WVHC asserted, the older the site, the greater the risk of bond forfeiture, since the mines are less likely to be producing coal and revenue.

In the chart to which this commenter refers, we were merely attempting to show how many of the permits issued for each year between 1982 and 1996 developed an AMD condition. The table indicates that fewer permits issued in 1996 developed AMD than did permits issued in preceding years and that there is a declining trend from 1982 to 1996. However, the commenter is correct that the universe of sites with AMD has grown since 1982 and, therefore, the reliance on historic data may not be the best tool for evaluating long-term needs. We agree that there is a need for more data and a rigorous data analysis. The State program amendment that we approved on December 28, 2001, provides for such actions through the tasks assigned to the Advisory Council.

WVHC stated that our assertion that the water treatment problem is decelerating is directly inconsistent with our statement on September 3, 1999, that ''[t]his problem is accelerating with the continued forfeiture of performance bonds that require water treatment.''

The commenter has misinterpreted our September 3, 1999, letter. The ''problem'' we referred to in that letter is the increasing inability of the Fund to meet its obligations. That is, the Fund was falling deeper into debt. We did not state, nor imply, as the comment suggests, that the rate of bond forfeiture sites requiring water treatment is increasing.

e. Comparison of OSM's Analysis With Other Studies

WVHC stated that our analysis is inconsistent with the conclusions of WVDEP's economic consultants in their draft February 2001 report entitled ''The Mountain State Clean Water Trust Fund.'' WVHC asserted that the report calculated that guaranteeing payment of future water treatment costs would require firms currently treating water to pay roughly $35.9 million annually. In contrast, the 7-Up Plan would generate revenues of only $20.79 million for the first three years, declining to $8.82 million thereafter.

This comment inappropriately compares two plans that are fundamentally different and not directly comparable. The goal of the ''Mountain State Clean Water Trust Fund'' was to create a trust fund to pay for water treatment costs on active mine sites as well as for bond forfeitures. The 7-Up Plan, however, is designed to pay the reclamation and water treatment costs for only revoked permits where the forfeited bond is not sufficient to do so. The 7-Up Plan is not designed to pay the water treatment costs of sites while they are active, i.e. while they are still under a permit. The $35.9 million water treatment cost estimate mentioned in the Trust Fund report has no direct comparison to the costs predicted in our September 7, 2001, analysis.

f. Analysis Reporting Methods

WVHC stated that our reporting is unconventional and makes it impossible to determine the cumulative effect of the increased tax on the Fund balance. According to the commenter, we also confused revenues with liabilities. As a result, the WVHC asserted, the net end-year balance in 2022 should be a negative $61.42 million, rather than the negative $7.75 million in our table.

This comment indicates a lack of understanding of the nature of water treatment. Water treatment is an operating cost that does not accumulate if the water is not treated in any given year. The only figures that should be accumulated as increasing debt are the capital costs. In any event, a cumulative negative figure is important as an indicator of when the Fund needs to be adjusted to assure sufficient revenue for water treatment or capital construction. We concur that the new Advisory Council must gather data and evaluate the adequacy of the Fund's ability to cover water treatment.

WVHC stated that we assumed that WVDEP's water treatment liability would not increase for the first two years, and would be limited to its actual current costs of $1.5 million. WVHC asserted that we based this assumption on the premise that WVDEP could not begin increased water treatment until more money became available from the increased special reclamation tax. However, WVHC stated, it would not take two years to generate more funds for water treatment and WVDEP has an obligation to begin reclamation of AMD within 180 days after bond forfeiture. As a result of this error, the water treatment costs in the first two years are underestimated by $3 million. Consequently, according to the commenter, the cumulative deficit will grow to $141.06 million by 2022, and only one year (2005) shows a surplus. In addition, Morgan Consultants stated that the data indicate that the Fund has negative balances in the first two years and therefore has no ability to complete reclamation of any bond forfeiture sites during that period.

Our assumption to limit water treatment costs to $1.5 million in the first two years is reasonable. The $1.5 million estimate is the State's current, actual annual operating costs. We expect this level of expenditure to continue until the increased tax revenues have had time to accumulate, and the State has had time to bid and award contracts, secure necessary easements and permits, design and construct needed treatment facilities, and begin treatment. It is not reasonable to assume that full treatment will begin immediately on all backlogged sites requiring treatment. We recognize that the current estimate of treatment costs is based on very limited data and a formula for estimating costs. WVDEP needs to collect data showing seasonal variation at sites requiring water treatment, and it must increase staff or hire contractors for site-specific designs of those treatment systems. Although WVDEP has an obligation under CSR 38–2–12.4.c. to begin reclamation within 180 days after bond forfeiture, that has not happened in all instances. However, we believe that the revisions to the State's ABS that we approved on December 28, 2001, will allow the State to eliminate that deficit and to begin treating pollutional discharges at all bond forfeiture sites. If changes in the tax rate are necessary to assure

elimination of the deficit, the revised ABS provides for the Advisory Council to recognize that need and to make appropriate recommendations to the Legislature and the Governor concerning needed adjustments to the special reclamation tax rate.

3. Methods Used to Estimate Water Treatment Costs

a. Cost Estimate of Reclaiming Bond Forfeiture Sites With AMD

WVHC stated that WVDEP has grossly underestimated the costs of reclaiming bond forfeiture sites with AMD. WVHC also stated that WVDEP used a methodology that its own consultant criticized as inaccurate.

WV Coal Association stated that we overestimated the capital operating costs for water treatment at bond forfeiture sites. For example, WV Coal Association stated, sediment ponds and needed roads would likely already be in place at sites where proper inspection and enforcement had mandated adherence to the mining permit. In addition, WV Coal Association stated that we over estimated the costs associated with powering water treatment systems. The majority of water treatment devices in use in West Virginia, the WV Coal Association asserted, are powered by the natural flow of water (similar to a water wheel) and require no electrical power source.

WV Coal Association argues that annual treatment costs will be reduced for two other reasons. The first reason is that ''the material that would likely lead to AMD as water leaches through the mining spoil is [typically] encapsulated on the bench area of the mine and isolated from water sources.'' The second is that ''WVDEP will rarely issue a permit where the generation of AMD is anticipated.''

In response, we acknowledge the difficulty of obtaining accurate reclamation cost estimates. Program liability cost estimates, derived from current WVDEP inventory data, are at best gross estimates that may either underestimate or overestimate the actual program liability costs. A number of factors, such as costing methodology and water quality data limitations, influence the accuracy of cost projections. Water quality data used with the inventory was obtained from the WVDEP bond forfeiture water quality database that includes analytical data from water samples collected by WVDEP staff and consultants. Water quality data can be negatively affected by insufficient samples to characterize the discharge, lack of seasonal variation data, adequacy of sampling protocol and accuracy of flow measurements, etc. However, we believe that WVDEP's inventory data will improve significantly over time as WVDEP gains new knowledge and experience and as it identifies the costs associated with planning, developing, installing, and treating bond forfeiture sites with AMD.

b. Methodology for Determining Loadings

WVHC stated that WVDEP's method of cumulating AMD loadings is incorrect. Quoting from OSM's December 2000 draft ''Appalachian Region AMD Inventory,'' WVHC stated that ''[a]cid loading is a function of the volume of flow from the discharge times the amount of pollutants contained in the discharge.'' WVHC also stated that WVDEP assumes that treatment cost is a simple function of cumulating the product of flow times concentration across all sites, and calculating cost as a function of the total loading. However, WVHC asserted, WVDEP's own consultant has stated that because many sites use a variety or combination of chemicals depending on flow volume or quality, temperature, availability, or a host of other factors, loads and flow cannot be summed, and the entire matrix must be viewed as non-cumulative.

In response, we acknowledge that each site requires its own analysis. We believe both WVDEP's and our analyses are simply methods to obtain rough cost estimates for overall planning purposes. Further refinement of actual treatment costs will take time and more site-specific data than is currently available. WVDEP must continually update its data and collect this kind of information.

c. Flow Data

WVHC stated that WVDEP's flow data is incorrect. WVHC stated that WVDEP's flow data is based on single sampling events during the driest month of a record drought year. WVHC stated that at a minimum, the data should be adjusted to account for the variability of flow, and the potential for higher flows in wetter years, and therefore, higher treatment costs must be considered.

WVHC stated that WVDEP based its analysis of flow data on the 1998 AMD inventory report. Chart No. 1 in that report, WVHC stated, contains flow data for each of the 112 bond forfeiture sites, but does not total the flow of those sites. The total flow of 6,251 gallons per minute (gpm) can be calculated by simply adding the flows of the individual sites listed in Chart No. 1, WVHC stated.

WVHC stated that in contrast to the 1998 data, two other WVDEP and OSM calculations show much higher flows. WVHC asserted that as a result, WVDEP's total annual cost of water treatment at these sites is greatly underestimated.

WOPEC addressed WVHC's claim that treatment costs were seriously understated by underestimating flow. WOPEC acknowledged that, ''As illustrated in the July 2, 2002 update, there were problems with flow and quality, but these problems overstated estimated costs rather than understating these costs.'' WOPEC emphasized that any program as complex as estimating treatment liabilities will encounter details that have to be added, eliminated, or modified as the program is implemented and associated problems are identified.

The WVHC comment inappropriately compares flow data from active mines on the 1998 AMD inventory with flow data from 112 bond forfeiture sites. However, the commenter has accurately identified an initial difference of 2,501 gallons per minute between WVDEP's and our representation of total flow rates for bond forfeiture sites. We are continuing to work with WVDEP on the inventory of bond forfeiture sites with AMD. Further evaluations identified errors in the inventories resulting in flow rate adjustments by both agencies.

We have always recognized that program liability costs, derived from the inventory data, are at best a gross estimate that may either underestimate or overestimate the actual program liability cost. There are a number of factors influencing the ''absolute'' accuracy of these cost projections, primarily the costing methodology and water quality data limitations (insufficient samples to characterize the discharge, lack of seasonal variation data, adequacy of sampling protocol and accuracy of flow measurements, etc.). Consequently, we may not know the exact costs until treatment systems have been installed at each site and actual construction and operating cost data are collected and analyzed. WVDEP's revised ABS includes provisions for adjustment in the event reclamation costs are either underestimated or overestimated. The State's ABS now includes an Advisory Council that is charged with ensuring the effective, efficient, and long-term financial stability of the special reclamation program and requires an actuarial review every four years.

d. Current WVDEP Chemical Treatment Costs

WVHC stated that WVDEP underestimated its own chemical treatment costs at five sites where WVDEP is responsible for chemical treatment by about $1 million. WVHC stated that WVDEP listed its total cost for five sites (DLM, F&M, Omega, Royal Scot, and T&T Fuels) as $1,540,000. The individual cost figures for each site differ greatly from WVDEP's other recent cost estimates for the same sites. For example, WVHC noted that the June 2000 WVDEP Fund balance sheet showed a total of $2.47 million, and August 8, 2000, WVDEP Fund Water Quality Efforts and Plans showed a total of $2.65 million for these five sites. Since annual operating costs are the major factor driving long-term costs, WVHC stated, the result is a huge underestimation of liability. WVHC also stated that other WVDEP information indicates that the State seriously underestimated the assumed water treatment costs for the T&T Fuels site.

WV Coal Association responded by stating that WVHC is incorrect in its assertion that the current cost estimates for treating AMD at the sites discussed above is $1 million per year less than other recent estimates. The lower number, WV Coal Association maintains, does not represent an estimate but is WVDEP's actual costs. Further, WV Coal Association notes that the F&M site is funded by a private trust with $3.8 million in assets.

We disagree with the comment that WVDEP has underestimated its water treatment costs at the five sites referred in the comment. WVDEP maintains expense records for all bond forfeiture sites where chemical treatment is conducted. WVDEP's most current annual treatment costs for those sites are $1,540,000. Although WVDEP included water treatment costs for F&M at $200,000, those costs are actually being reimbursed through a trust fund administered by a local watershed group and consequently, upon reimbursement, do not represent a liability to the Fund. The current water treatment costs at the T&T Fuels site are $400,000. We believe that some of the costs identified by the commenter include both operating and capital construction costs for the bond forfeiture sites mentioned above.

e. Water Treatment Costs at Active Permits

WVHC stated that OSM and WVDEP have underestimated actual treatment costs at active mine sites with AMD. WVHC asserted that OSM and WVDEP state that actual treatment costs at active mine sites with AMD are no more than about $25 million. In contrast, WVHC asserted, WVDEP's own consultant has stated:

> Using historic State expenditures as a standard, industry spends at least $30 million per year neutralizing acidity in West Virginia. Capital-intensive, high-volume plants designed to deal with large alkaline flows laden with iron and difficult manganese sites suggest the total bill to industry exceeds $60 million.

WVHC asserted that WVDEP chose to use a simplified model for estimating treatment costs at active sites rather than obtaining all current actual costs from industry. As a result, WVHC asserted, OSM and WVDEP have ignored available or obtainable data and instead used a methodology that likely underestimates actual costs. WVHC further asserted that to the extent that WVDEP's consultant, WOPEC, used actual cost data from some industry sites, WVDEP did not verify that data and does not know where it came from or how it was obtained.

WOPEC responded to these assertions. WOPEC stated that actual cost data was used in estimating annual treatment costs and that, based on its experience, this data was quite reliable. In its December 17, 2001, report, WOPEC stated that in developing a general methodology, WVDEP obtained actual treatment costs from numerous coal companies that covered 95 individual treatment sites. This was then supplemented with actual costs from 22 treatment sites currently operated by the WVDEP. The costs for these sites were then used to determine the annual cost per ton of loading for acidity, iron, and manganese. WOPEC also noted that, as seen in the December 17, 2001, report, actual costs were utilized in projecting annual estimated treatment costs. WOPEC stated that OSM did not utilize loading and actual operator treatment costs to produce its annual estimated costs, but instead utilized a modified version of the Tetra Tech methodology, which produced nearly the same estimated annual treatment costs as the WVDEP estimate.

WVDEP and OSM independently conducted treatment cost calculations for active mines and arrived at cost estimates of $25,600,000 and $24,990,761, respectively. Although we relied on a computer program to run estimated costs, WVDEP hired a consultant, WOPEC, to assist in developing its estimated annual treatment costs. The consultant used actual treatment costs supplied by the coal industry, as well other State treatment costs to develop a method to calculate costs. These costing methodologies are explained in Appendix I of the Report. Both models are conservative. That is, both models probably provide higher projected cost estimates than necessary, because sites are included in the inventory that will not actually require long-term water treatment after land reclamation is completed. Also, the estimates include a significant cost component for pumped discharges that are associated with active mines that are likely to have smaller discharges after mining. Both WVDEP's and our costs were limited to annual treatment and did not include capital construction costs. It is not clear, however, whether the $30—$60 million cost range that WVHC referred to is adequately supported by data, and it is not clear whether these costs are for treatment only or are intended to include both capital construction and operating costs. Therefore, we find that there is insufficient justification for use of WVHC's $30—$60 million estimate in place of the cost estimates that both we and WVDEP developed.

f. Costs of Treating to Effluent Standards

WVHC asserted that WVDEP understated water treatment costs by including costs at sites that are violating required effluent standards. WVHC stated that WVDEP's analysis is based on the assumption that existing sites that are treating AMD are complying with required effluent standards under the Clean Water Act. WVHC stated that, in an October 2001, slide presentation produced by OSM in response to the WVHC's document requests in the pending citizen suit, OSM stated that it downloaded records of effluent violations at bond forfeiture sites from WVDEP's Environmental Resources Information System (ERIS) database. From these records, WVHC stated, OSM determined that 46 sites were producing AMD that was causing violations of effluent limits under the Clean Water Act. WVHC stated that those permits with violations include T&T Fuels and Royal Scot Minerals, which are two of the sites where WVDEP is responsible for chemical treatment. Yet, WVHC asserted, WVDEP has based its treatment costs at those sites on existing treatment levels, not on the costs needed to comply with required effluent limits. WVHC stated that WVDEP's proposal is therefore inadequate because it fails to take account of the cost of treating acid mine drainage to Clean Water Act effluent standards.

In response, we acknowledge that treatment costs may go up for any sites not meeting Clean Water Act standards. We have not completed detailed analyses of the sites to determine if

these exceptions are caused by site or technological limitations that would have a significant bearing on costs. Again, we were only doing a model analysis to obtain gross cost estimates for the entire universe of pollutional discharges at bond forfeiture sites. The State will continue to refine these data, to fully account for the costs of treating AMD to Clean Water Act effluent standards.

g. Passive Water Treatment Costs

WVHC stated that WVDEP improperly limited treatment costs to the costs of passive treatment. WVHC stated that to be effective on a long-term and permanent basis, treatment costs must consider the cost of constructing treatment facilities and using chemical treatment for such discharges.

WOPEC responded to WVHC's assertion that treatment costs were limited to the costs of passive treatment systems by stating that the assertion was absolutely false and that:

> absolutely no passive treatment methods or costs [were] used whatsoever in my projection of estimated annual treatment costs for the Active Permits or the Bond Forfeiture permits. All cost data was derived from active type treatment systems utilizing some form of chemical treatment.

We have no evidence that would lead us to conclude that WVDEP limited its treatment costs to the costs of passive treatment systems. However, passive systems may be used if sufficient funds are provided for their continued maintenance and replacement as long as treatment is necessary on bond forfeiture sites.

h. Removal of Sites From AMD Inventory

WVHC stated that OSM and WVDEP improperly deleted active sites from its AMD inventory.

We disagree. The commenter provides no basis for this allegation. We only deleted a site from the active inventory if it was found to have no pollutional discharges, or it was moved to the bond forfeiture inventory if the permit was revoked. The OSM/WVDEP inventory effort began by including all permanent program bond forfeiture permits listed in the WVDEP Bond Forfeiture Permits Database that were shown to have ''yes'' in the AMD field of that database. That review identified 219 permits with AMD from a total of 1,695 bond forfeited permanent program, interim program and pre-law coal mining permits. After several months of discussions and permit file and field reviews, WVDEP and OSM agreed to a revised listing of permits to be included on the AMD inventory. Questionable sites were retained on the inventory. This was to ensure that such sites would not be eliminated from the inventory if they could eventually become a future AMD liability to the Fund. The water quality consideration used to determine retention on the inventory was based on the required effluent limitation standards for the site when it was active. This inventory effort actually increased the total number of permits from the listing that WVDEP had previously identified as bond forfeiture sites requiring treatment.

WVDEP has since prioritized the inventory and designated many of the questionable permits as insignificant discharges not requiring treatment. We entered into a work plan agreement with WVDEP to evaluate, during 2002, all those permits (26) to determine if WVDEP's designation is correct and whether or not the permits should be retained on the inventory. The 2002 work plan also includes an analysis of the remaining permanent program permits included in the bond forfeiture permits database (1,695 permits) that show a ''No'' or were left blank in the AMD field of the database. We believe that our overall approach in developing the inventory is very reasonable and complete, and we did not eliminate permits from the inventory with disregard for future liability as portrayed by the commenter.

WVHC stated that in October 2001, OSM and WVDEP signed a ''Detailed Oversight Evaluation Work Plan'' for Evaluation Year 2001, which states:

> While developing OSM's Regional AMD Inventory with WVDEP, 112 sites were removed from WVDEP's 1998 Active Mine Drainage Inventory due to insufficient water quantity or quality information.

Thus, WVHC stated, OSM and WVDEP failed to analyze these 112 sites and assumed that they pose no risk of future AMD liability. A more realistic assumption, WVHC stated, is that these sites will produce AMD and become a Fund liability at the same historical rate as other sites.

In response, we note that the 112 sites or records (80 permits) that were removed from the 1998 Active Mine Drainage Inventory were removed only after appropriate consideration. Nine of the 80 permits had been revoked and are now the responsibility of the Special Reclamation Program. Forty-nine permits had received a Federal inspection with no indication of water quality problems. The violation history for each of the remaining 22 permits was checked to determine whether effluent limitation violations had ever been issued. Seven permits were identified as having past effluent limitation violations. Those seven permits are part of our oversight for 2002 and will be evaluated in the field this year.

WVHC stated that the ''Detailed Oversight Evaluation Work Plan'' for Evaluation Year 2001 also states:

> Of the 918 permanent program permits that had been forfeited when this effort started, OSM and WVDEP focused on 219 permits where the WVDEP had recorded in its ''permits'' database that at one time produced AMD. OSM and WVDEP reached consensus that 148 of the 219 permits should continue to appear on an AMD inventory. For the remaining 699 permanent program permits, OSM proposes to conduct a spot check to achieve a level of confidence that none of the 699 permits generate AMD.

Thus, WVHC stated, OSM and WVDEP excluded these permits from its analysis and assumed that these permits would not become a future liability to the Fund. WVHC stated that according to a draft OSM memorandum, WVDEP also refused to assist OSM in validating or refining the AMD bond forfeiture inventory for any permit where the Special Reclamation Program database showed that land reclamation had been completed.

We disagree with the commenter's assertion that we improperly assumed that none of these permits would produce AMD and become a Fund liability and, therefore, should have included them in the analysis. We found in our analysis of the WVDEP Bond Forfeiture Permit and Water Quality databases that WVDEP has been conducting an aggressive water sampling program at bond forfeiture sites since 1990. Despite statements in the draft OSM memorandum, the State has recently been working with OSM on gathering data for any bond forfeiture site with a pollutional discharge. The WVDEP has devoted an exceptional amount of time and effort to sampling water at permits with bond forfeiture (including interim permits). The extensive water quality work that WVDEP has performed at these sites provided us confidence that the WVDEP had accurately identified the majority, if not all, permanent program bond forfeiture permits with AMD. However, due to our oversight responsibilities, we propose to spot check the remaining 699 permits. Given our experience to date, we do not anticipate finding any discrepancies during this review that would alter WVDEP's original analysis.

WVHC also stated that the Oversight Plan also states:

> During the cooperative development of the Bond Forfeiture AMD Inventory in 2000/2001, WVDEP identified 54 permits where

the reclamation liability analysis, including water quality, had not been completed, but AMD was a concern. The WVDEP agreed that all 54 sites should be included on the Bond Forfeiture AMD Inventory and site-specific information be collected by WVDEP and provided for the Inventory. That information was not available for 11 of the 54 permits at the end of the Inventory effort.

WVHC stated that OSM and WVDEP excluded those 11 permits from the analysis because of the optimistic assumption that they would not become a liability to the Fund. According to the commenter, a more realistic assumption is that these sites will become liabilities to the Fund at the same historical rate as other sites.

The 11 permits were not excluded from the cost calculations. A default cost was initially used pending updated water quality information from WVDEP, which will allow for the estimation of site-specific water treatment costs.

i. OSM's Consultant's (Tetra Tech) Analysis

WVHC stated that, in its August 24, 2000 ''Final Report on the Contingency Costs of Long-Term Treatment of Mine Drainage,'' OSM's consultant, Tetra Tech, calculated that the long-term costs of treatment of AMD at forfeited mine sites in West Virginia would be $2,643,099,976 after fifty years. In contrast, WVHC stated, WVDEP calculates that its annual liability for AMD treatment will be less than $10 million per year after twenty years. After fifty years, the cumulative liability based on this annual rate would be less than $500,000,000. WVHC stated that this is less than one-fifth of the Tetra Tech figure. WVHC asserted that WVDEP and OSM have failed to reconcile WVDEP's analysis with Tetra Tech's analysis.

WOPEC responded to the comment that WVDEP and OSM have failed to reconcile WVDEP's analysis with Tetra Tech's analysis by pointing out that Tetra Tech relied upon the methodology used to estimate treatment costs for Superfund sites. According to the commenter, that methodology does not translate well to treatment of pollutional discharges from coal mines.

We disagree with the commenter's assertion that we failed to reconcile WVDEP's analysis with Tetra Tech's analysis. There is nothing to reconcile, because the Tetra Tech analysis was not intended to produce a valid cost for water treatment. In its August 4, 2000, ''Final Report on the Contingency Cost of Long-Term Treatment of Mine Drainage,'' Tetra Tech states that its calculations were ''illustrative of the use of a methodology,'' but cautioned that ''they did not reflect final determinations of unfunded costs.'' In other words, Tetra Tech was demonstrating how to use its methodology, but it was using hypothetical data to do so. The Tetra Tech report advises OSM not to use the examples contained within the report as cost projections for AMD treatment. The Tetra Tech report in question was done prior to the completion of the OSM inventory that shows that costs for all active sites do not exceed $25 million per year, and only a portion of those sites are likely to be forfeited in the future. The report used examples of treatment costs that do not reflect current estimates.

4. Future Land Reclamation Costs

a. Actual Land Reclamation Cost Estimate

WVHC stated that OSM and WVDEP grossly underestimated West Virginia's unfunded liabilities for land reclamation at bond forfeiture sites. WVHC stated that WVDEP's estimated $27.9 million liability for land reclamation works out to only $2,558 per acre, based on 304 permits that contain 10,902 disturbed acres. WVHC stated that WVDEP's current land reclamation costs are $5,400 per acre for poor reclamation. The commenter stated that WVDEP's reclamation costs on forfeiture sites were $2,820 per acre in 1994—the lowest per acre cost in the history of the program, and in the twelve months ending June 30, 1995 were $4,214 per acre statewide.

In contrast, the WV Coal Association stated that several of the land reclamation estimates appear excessive. On some sites, the WV Coal Association asserted, land reclamation has been completed with final regrading and revegetation work in place. WV Coal Association also stated that we failed to account for the sites where remining operations will eliminate environmental liabilities altogether, and at no cost to the Fund. WV Coal Association pointed out that a recent rulemaking by the U.S. Environmental Protection Agency extends incentives to remine sites to operations extracting coal from sites forfeited since 1977. WV Coal Association stated that many of the permits listed on the Fund inventory were revoked and bond forfeited for minor infractions such as failure to renew or failure to maintain proper insurance. The commenter also stated that most recent WVDEP reclamation costs are from large sites and, therefore, are not representative of all sites.

We believe that, at the time of our analysis, the estimated land reclamation liabilities listed in the analysis represented the best estimate available of the expenditure necessary to complete reclamation of those sites. We recognize that the source of that information is not without deficiencies. However, because it is the best information available, we have used it in evaluating the entire system. Individual discrepancies would not alter the findings that we made concerning the State's amendment. The Advisory Council will consider the reliability of that data in developing its recommendations.

The existing land reclamation liabilities of the Fund are estimated to be $27.9 million. At the time of our analysis, Fund data indicate that $13.5 million dollars had already been spent at 83 of the 304 sites. Although we cannot state exactly what has been expended, we know that the total amount that the Fund has or expects to expend on these sites is approximately $41.4 million. If that were applied to the disturbed acres, the per acre figure becomes approximately $3,800 ($27.9 million + $13.5 million divided by 10,901 acres) rather than $2,558.

Not all of the 10,901 acres listed as disturbed acres require backfilling and grading, which is the most expensive component of land reclamation. In fact, we are aware that in some cases the disturbed acreage figure is a carryover from the inspection and enforcement estimate of the portion of the permit that had been disturbed without reduction for any reclamation completed by the operator. The WVDEP does not necessarily revise the disturbed acreage data until it is ready to contract the site for reclamation and have an accurate measurement. Therefore, dividing the total liability amount by the disturbed acreage figure does not provide an accurate cost per acre cost estimate.

All of these projections are estimates. The revised ABS includes periodic review by the multi-interest Advisory Council, which will have the benefit of determinations provided by a professional actuary, to evaluate the need for future adjustments to the Fund. The WVDEP has spent considerable effort to redesign the data management system that it is using for the Fund and that effort should result in a system that will provide accurate, conclusive information that can be used for analysis and management decisions.

WV Coal Association stated that recently implemented changes to West Virginia's mining program will reduce the liability associated with a bond forfeiture site. For example, new regulations associated with excess spoil minimization, approximate original

contour (AOC) restoration, and contemporaneous reclamation will reduce the amount of disturbance. In addition, WV Coal Association stated, a properly maintained inspection and enforcement program should not only reduce the liability of a given site, but should prevent bond forfeiture totally. WV Coal Association asserted that, at any given time during the life of the mining operation, only one-third of the permit should be disturbed, thus effectively increasing the amount of bond available in the event of forfeiture by three times the original amount.

In response, we agree with WV Coal Association's comment that a properly implemented inspection and enforcement program and close adherence with the State's excess spoil, AOC, and contemporaneous reclamation rules should reduce the amount of unreclaimed disturbed area and, therefore, the potential reclamation costs in the event of bond forfeiture (although it will not prevent bond forfeiture, contrary to the commenter's allegations). However, the WV Coal Association failed to mention that only mountaintop removal mining operations are subject to the requirement that only one-third of the permit area be disturbed at any given time. Furthermore, there are other provisions within the State's rules that, under certain circumstances, would allow for the approval of larger disturbances involving mountaintop removal and multiple seam mining operations. Therefore, while relevant, we do not believe that these observations warrant special consideration in the analysis of the West Virginia ABS.

If reclamation costs are lower, the Advisory Council has the authority to recommend appropriate Fund adjustments to the Legislature and the Governor. We agree that the ideal program that all States should strive to achieve would be one that prevents the occurrence of bond forfeitures. Unfortunately, we do not believe that the total elimination of future bond forfeitures is a realistic expectation, and we must plan accordingly.

WV Coal Association stated that several of the permits listed in the forfeiture inventory also appear to qualify for AML funds and should be removed from the Fund inventory.

We do not believe that there are any AML eligible sites requiring reclamation under the Fund. However, if there are any, WVDEP should identify those sites and, based on its approved program, determine if they should be removed from the inventory.

b. Cost of Reclamation at Four Sites

WVHC stated that WVDEP's reclamation costs at three sites ($2.3 million at the Omega site, an additional $2.9 million at the T&T site, and $25 million at the Royal Scot site) exceed the WVDEP's $27.9 million estimate for all land reclamation. These three sites combined, therefore, exceed $27.9 million by themselves, without considering any of the other 110 bond forfeiture sites on the list.

WVHC further stated that a State official testified that this has not fixed the problems at the Royal Scot site. Fixing the problems at Royal Scot would cost either (1) $25 million in one-time capital costs for a complete fix; or (2) $6.5 million in capital costs for land reclamation and $30,000 to $40,000 per month in perpetual operating costs for water treatment. This translates to $360,000 to $480,000 per year, much higher than the $250,000 WVDEP assumed. Furthermore, the $25 million in capital costs for this one site alone approaches the total estimated costs for all existing bond forfeiture sites in the state, which WVDEP estimated at $27.89 million. In the WVDEP's spreadsheet, the total land reclamation liability for all Royal Scot sites amounts to only $6,222,631.

Additionally, WVHC stated, WVDEP has estimated that the cost of land reclamation for a small mountaintop removal mine that recently forfeited its bond (Quintain) will be more than $15,000.00 per acre. Because the Quintain mine was permitted before the requirements of the *Bragg* consent decree went into effect, the $15,000 per acre reclamation costs are significantly lower for that mine than such costs will be post-*Bragg*. WVHC stated that WVDEP's land reclamation estimate is therefore far too low, even before the more expensive reclamation requirements resulting from *Bragg* are included in the cost calculations.

The liability figures discussed in this comment point out the difficulties encountered when parties try to quantify the liabilities of the Fund. The $2.3 million reclamation liability for the Omega site and the $2.9 million for the T&T site noted in the comment are not the remaining land reclamation liabilities. All land reclamation at the Omega site has been completed. The land reclamation liability for the T&T site is $105,000 and $6.2 million for the Royal Scot sites.

WV Coal Association noted what it believes are discrepancies between WVHC statements on cost estimates and those of a State official's testimony.

We believe that these differences of opinion serve to emphasize the importance of WVDEP's current efforts to improve the quantity and quality of its Fund inventory data. The Quintain forfeiture site was included in the inventory. However, our cost projections did not include a special analysis of mountaintop removal mining permit failures. Nor have we conducted a study of the effects of the permitting requirements related to the consent decree resulting from the Bragg litigation on the expected costs to complete reclamation in the event of bond forfeiture. While it is logical that the reclamation costs to an operator of a mine operating under those criteria would be increased, the cost to the Fund to complete reclamation of such a site in the event of bond forfeiture might not be as significantly impacted due to constraints such as limits on extent of disturbed area and spoil placement. Furthermore, the post-Bragg standards would only apply to those mine sites that were permitted under the new requirements or modified and forfeited after they went into effect. As we stated above, we believe that West Virginia has put in place an ABS, including increased special reclamation tax rates, the Advisory Council, and the recurring actuarial determinations, that will provide the State with the means to fully evaluate and manage the Fund, its current reclamation obligations, and estimates of future bond forfeiture rates and reclamation cost obligations, so that the State can fully meet those demands.

c. $3.9 Million Land Reclamation Cost Estimate

WVHC stated that the ''Last 3 Yr. Average net land liability'' figure of $3.9 million was based on the difference between the bond amounts for forfeited sites during the last three years (1998–2000), and the estimated land reclamation liability for those sites. This figure represents the liability for future land reclamation at active sites that forfeit their bonds in the future. In calculating this figure, WVHC stated, the State official ''didn't project any cost for active permits for land reclamation,'' and ''didn't consider [the possible] bankruptcy of any company.'' Morgan Consultants also provides a detailed review of specific companies as further indications of the risk of failure.

Morgan Consultants stated that WVDEP has provided no analysis or justification for the use of the $3.9 million value. Morgan Consultants stated that nowhere in the supporting data or in the OSM review is there any calculation of the liability associated with the existing permits in West

Virginia. Therefore, WVDEP can make no informed representation of the current reclamation liability.

Morgan Consultants stated that the use of the $3.9 million value for annual reclamation costs is totally inadequate and not supported by WVDEP's own data ''as the current reclamation liability for land reclamation consists of about $27.9 million.'' According to the commenter, ''the accrual of such a significant historic liability is clear evidence that WVDEP does not initiate reclamation efforts to reclaim the site in accordance with the reclamation plan within the required 180 day period.'' The commenter also claimed that the inadequacy of the $3.9 million estimate is further evidenced by comparison to WVDEP's own estimate of the liability associated with the reclamation of the 46 permits revoked in 2000. WVDEP estimated reclamation costs for those sites at $6.21 million.

We agree that WVDEP did not provide a detailed analysis in support of the estimated $3.9 million shortfall for land reclamation. WVDEP advised that it arrived at this amount by using the estimated liability for bond forfeiture sites during calendar years 1998, 1999, and 2000, that were on the listing of land liability sites and adding 10 percent for inflation. We found this estimate to be reasonable based on an earlier OSM/WVDEP study. The June 1999 joint OSM/WVDEP Phase II Report of the West Virginia ABS had a similar table for a five-year period coinciding with State fiscal years beginning in July 1992. The shortfalls for those years were $4.7 million, $6.6 million, $6.1 million, $2.3 million and $1.7 million with an average shortfall of $4.3 million. Therefore, we believe the State's estimated $3.9 million shortfall is reasonable because it doesn't vary significantly from our estimate of $4.3 million.

The ''Last 3 Yr. Average net land liability'' is the difference between the amount of the bond and the accrued liability for the permits revoked during a one-year period based on an average of the last three years. Such a projection uses historical data for both the forfeiture rate that would add bond forfeiture revenues to the Fund and for the liability or amount of money that must be expended from the Fund to complete the reclamation of the sites. The difference between these is the revenue shortfall that must come from a source other than the forfeited bonds. The cost of reclaiming active mines and bankruptcies are all considered based on the historical record of bond forfeiture rates and reclamation costs. We believe that the historical bond forfeiture rate on an annual basis is a good reference for projecting future forfeiture rates and, consequently, liabilities.

d. Historical Costs Used for Estimates

Morgan Consultants stated that the information provided by the WVDEP does not provide any data of permit defaults and bond forfeiture data by year for the last ten years, even though this information is critical for the definition of the historic trends.

We agree that WVDEP did not provide the data suggested by the commenter. However, State data show that the following number of bonds were forfeited from 1996 through 2001: 1996—52, 1997—35, 1998—31, 1999—26, 2000–61, and 2001—38. The Phase II Report mentioned above also has a summary showing the number of bond forfeitures that covered the five-year period from July 1992 through June 1997. The number of bonds forfeited during those State fiscal years were: 1992 to 1993 = 94; 1993 to 1994 = 94; 1994 to 1995 = 122; 1995–1996 = 60; and 1996 to 1997 = 53. Although the exact data mentioned is not available, there is historical data available with regard to the number of sites and revenues needed.

Morgan Consultants stated that review of data supporting the WVDEP ABS does not indicate any analysis of the average disturbed area per permit for those permits placed in bond forfeiture per year for each of the last 10 years. WVHC stated that WVDEP does not provide any analysis of size of the current permits. Without these data, WVHC asserts, there is no means to evaluate the applicability of the historic reclamation costs to define the future liability. WVHC stated that WVDEP did not include any analysis of the permit area when developing its proposal.

We have found that the WVDEP did not have the data checks in place to ensure consistency of data entry and therefore we have not attempted to make projections using certain data fields such as the disturbed area. In some cases, the disturbed area is from inspection and enforcement data showing the portion of the permit area that has been disturbed without any reductions for reclaimed areas. Generally, after a contract has been let for reclamation work, the disturbed area is revised to reflect the actual disturbed area to be reclaimed under the contract. We determined that from 1993 through 2000 the average acreage for revoked permits ranged from 22 acres in evaluation year 1998 to 103 acres in evaluation year 1999. Currently, the average number of acres per permit is 119 acres, as reported in Table 2 of the 2001 West Virginia Annual Evaluation Report.

e. Reclamation Costs at Large Mountaintop Removal Mines

Morgan Consultants stated that the bond forfeiture data, relied upon by WVDEP to calculate their $3.9 million per annum land reclamation liability, does not include many large sites, as the average disturbed acreage of current permits in bond forfeiture is 35.8 acres. However, one recently forfeited (January 2000) permit the Quintain operation (Permit # S–5033-96), has a disturbed acreage of 255 acres and a reclamation cost of $15,439 per acre, as estimated by WVDEP. The total estimated reclamation cost of $3.94 million for that permit alone exceeds the proposed annual land reclamation of $3.9 million.

We previously explained the origin of the $3.9 million per year revenue shortfall estimate. Also, the year 2000 was significantly higher both in the number of sites and the amount of reclamation liability that the Fund was obliged to assume. Previous time periods have also had spikes, but when averaged over multiple tear periods, the forfeiture rate has been relatively constant. The Advisory Council is charged with reviewing the financial soundness of the Fund on a routine basis and this process can provide for adjustments as needed to ensure the continued fiscal soundness of the Fund.

WVHC stated that WVDEP failed to calculate the cost of reclaiming a large mountaintop removal mine if the operator forfeited at the time when reclamation costs are at their greatest. WVHC stated that WVDEP has failed to consider the amount of disturbed acreage for past forfeited permits, or the increasing size of disturbed areas for current permits. WVHC asserted that, therefore, WVDEP has no basis for extrapolating from historic to future costs of land reclamation, and has likely understated the costs. Morgan Consultants stated that an indication of the inapplicability of the reclamation costs from historic sites in predicting future costs is the difference in size of the current forfeited permits when compared to the historic sites. Morgan Consultants stated that the average disturbed acreage for all current forfeited permits is only 35.8 acres. This is dramatically less than the potential disturbed area on a large surface mine such as Spruce or Alex Energy.

WV Coal Association stated that, because Spruce and Alex Energy are exceptionally large, Morgan is incorrect in his assumption that Spruce and Alex Energy are indicative of the majority of

permits sought by mining companies and approved by WVDEP. Also, WV Coal Association stated, because of a 250-acre threshold on proposed mining sites, implemented by the U.S. Army Corps of Engineers as a result of a settlement agreement, most proposed permits are designed to fall within the 250-acre threshold, thereby limiting the size of the mining project.

We believe that historic data for forfeitures and reclamation costs is the best and most reliable information available for projecting future forfeitures and reclamation costs. Because the ABS statutory provisions require the Advisory Council to continue monitoring forfeiture and reclamation cost data, changes can be made in the ABS as necessary to respond to changing conditions. We believe that this feature will allow the ABS to adapt to changes in a more timely manner and consequently is a better method for managing a dynamic program, such as the Special Reclamation Program.

Morgan Consultants stated that any review of reclamation liability associated with the permit size should separate the surface mine operations from the analysis of underground mines or mine support facilities as the liabilities have totally different characteristics. WVHC stated that WVDEP's analysis did not evaluate the different mining types separately.

We have not categorized permits by size or type. Instead, we looked at the ABS as one system and based our evaluation on the whole unit not the component parts. If the State's site-specific bonding rates were being changed, then we would agree that the different types and sizes of operations should be segregated and considered separately. However, we do not believe that this separation is necessary at this time.

WVHC stated that if Arch, Massey, or AEI were to fail, the cost of reclaiming its sites would be tens or hundreds of millions of dollars. WVHC stated that Morgan Consultants estimates that the failure of a moderately large surface mine (4 million tons per year) at an inopportune time would cost 30 million dollars to reclaim just to achieve rough regrade. A huge mine like the proposed Spruce Mine with a large contemporaneous reclamation variance would cost much more.

We agree that the land reclamation cost associated with the reclamation of a large mountaintop mine is not reflected by previous forfeitures. We believe that to manage these costs WVDEP must continue to vigorously enforce its contemporaneous reclamation requirements and continue to require site-specific bonds up to the $5,000 per acre limit to ensure reclamation. The increased bond amounts will help lessen the exposure of the Fund in the event of such a bond forfeiture. We agree that a risk analysis should be done to consider the potential impact that the failure of large mining operations would have on the State's ABS. These are some of the risk factors that the Advisory Council will have to consider when making recommendations to the Legislature and the Governor concerning the fiscal soundness of the Fund.

f. Potential Failure of Large Mining Companies

WVHC stated that WVDEP did not consider the potential failure of a large mining company like Arch Coal, Massey Energy, or AEI Resources. Such a failure is possible if bonding companies go bankrupt, coal prices decline, coal mined outside of Appalachia becomes less expensive in the market served by coal from Appalachia, or coal use declines as a result of environmental regulations. In its February 2001 draft report to WVDEP, ''The Mountain State Clean Water Trust Fund,'' WVDEP's economic consultants at Marshall University stated that ''it is possible over the next 25 years some firms in the Fund may fail.'' Fund Report, p. 7, Ex. 24. ''This occurrence directly transfers the cost of water treatment from the private to the public sector.'' This report recognized that ''the coal industry faces enormous risks,'' and therefore an insurance fund ''is needed as a protection for the State's taxpayers.''

Morgan Consultants stated that the consolidation of the mining industry would result in the default of a significant number of permits and a significantly higher liability than the failure of one company with one permit. Morgan Consultants stated that neither WVDEP or OSM has provided any data to define the consolidation of the industry, nor have they reflected such consolidation in the determination of potential default rates.

WVHC stated that by looking only at reclamation costs from past bond forfeitures, WVDEP has not calculated its potential liability from the failure of one of these large companies, since none of the companies that have failed in the past twenty years approaches the size of these companies. Consolidation in the mining industry makes such catastrophic failures far more likely than in the past.

We agree that these comments identify a potential problem, but they do not offer any suggestions for how it should be addressed. The ABS did see a spike of forfeited bonds during 2000 when the Royal Scot permits were revoked. Likewise, the annual revenue shortfall also reflects that spike for the year. The number of bond forfeiture sites has been on a downward trend, but deviations should be expected. As the coal industry has consolidated and only the larger, better capitalized companies have survived, fewer permits are being revoked. However, as the number of mining companies has decreased, we recognize that the failure of a larger company could have a significant impact on the Fund.

At the current time, past cost is the best information available for the evaluation and projection of bond forfeitures and the cost to complete reclamation. Although the failure of a large mining company could be a very significant event, we do not believe that the failure of such a company would necessarily result in the forfeiture of all permits held by that company. Many could be assumed by another operator, especially if the permitting enhancements currently underway have improved the accuracy of the hydrologic assessments and reclamation plans so that the likelihood of a long-term liability due to AMD is greatly reduced or eliminated. We also believe that the probability of such a failure is significantly less for the larger operations that plan to remain in the coal business for years to come than it is for smaller undercapitalized companies that have typically appeared on the bond forfeiture list. Further, as mentioned above, these are the potential risks that the Advisory Council will need to study. We believe that the Advisory Council, together with the actuary, will be able to respond as the need arises and recommend the adjustments necessary to keep the ABS on a sound financial basis. The Advisory Council is also tasked to study the development of alternative financial processes that ensure the long-term stability of the Fund. This study would include an analysis of the risks mentioned above, and may require adjustments in the funding mechanisms to ensure that such risks do not jeopardize the stability of the Fund.

g. Reclamation Costs at Mines With New Commercial Forestry PMLU

WVHC stated that WVDEP considered neither the cost of reclaiming sites to the standards required by the State's new Commercial Forestry and Forestry regulations nor the cost of deleting grasslands and fish and wildlife habitat from the list of uses approved for AOC variance mines. WVHC asserted that the new Commercial Forestry and Forestry

regulations will significantly increase the cost of reclamation after 2000. Therefore, WVHC asserted, WVDEP's plan fails to contain sufficient funds to accomplish post-2000 postmining land uses and reclamation costs.

Morgan Consultants stated that there are additional costs associated with the selective excavation, transport, and placement of soil replacement material. This could cause the cost per acre to significantly exceed WVDEP's estimate of $2558 per acre for land reclamation.

WV Coal Association stated that not every operating or proposed permit that could default has a postmining land use of commercial forestry. Therefore, these costs won't apply to all permits.

In response, we note that the impact of the commercial forestry rules has not been quantified for reclamation purposes in the event of bond forfeiture. Many factors impact reclamation costs including how much area has been allowed to be disturbed and unreclaimed, how much overburden must actually be moved and how far, and regrading and establishing an acceptable vegetative cover compatible with achieving the approved postmining land use. We believe that with the increased bond amounts and the mechanism for future adjustments in revenues, a positive balance in the Fund can be attained and maintained. The site-specific bonds for these sites, while not adequate to fully cover the cost of reclamation, will be significantly greater than previously required. Any increased costs will be partially offset by those increases. Furthermore, as WV Coal Association alludes, the commercial forestry postmining land use is only an option, and then only for mountaintop removal mining operations that obtain a variance from AOC. Not all mining operations will have to comply with these requirements. In addition, the legislation charges the Advisory Council with making recommendations to the Legislature and the Governor for any adjustments needed to keep the system functioning on a sound financial basis.

h. Reclamation Costs at Mines Required To Meet New AOC+ Policy

WVHC stated that WVDEP did not consider the costs of complying with WVDEP's June 5, 2000, final AOC guidance policy document, the so-called ''AOC+ Policy.'' For the first time, WVHC asserted, the AOC+ Policy requires compliance with SMCRA's AOC requirements and with the Section 404(b)(1) guidelines promulgated by the U.S. Army Corps of Engineers under the Federal Clean Water Act. WVHC stated that compliance with these provisions will significantly increase the cost of land reclamation for both mountaintop removal and contour mines because of the significantly increased spoil handling costs associated with minimizing the size of fills. WVHC asserted that WVDEP's plan does not even mention these costs, and OSM did not consider these increased costs. Morgan Consultants stated that older permits have significantly less stringent reclamation requirements than are included in current permits.

In response, we note that the impact of the AOC+ guidelines on bond forfeiture reclamation costs has not been quantified. Many factors impact reclamation costs, including how much area has been disturbed and left unreclaimed and how much overburden must actually be moved. We believe that with the increased bond amounts and the mechanism for future adjustments in revenues, a positive balance in the Fund can be attained and maintained. In addition, the site-specific bonds for these sites, while not adequate to fully cover the cost of reclamation, will be significantly greater than previously required. Any increased reclamation costs will be partially offset by those increases. Furthermore, given the reduction in the number and size of excess spoil fills due to implementation of the State's AOC+ Policy and better contemporaneous reclamation, the cost of reclaiming larger mines may actually go down when compared to past mining practices. These are some of the factors that the Advisory Council will have to consider when making future recommendations regarding the Fund.

i. Costs of Reclaiming to Approved PMLU

WVHC stated that WVDEP failed to calculate the cost of completing the reclamation plan at forfeited sites, as Federal law requires. WVHC stated that historically, WVDEP has not required strict adherence to the reclamation plan for permits for which bond has been forfeited. As a result, WVHC asserted, WVDEP's calculations do not include all expenditures ''sufficient to assure completion of the reclamation plan'' as section 509(a) of SMCRA requires. Therefore, WVHC asserted, WVDEP's cost projections are incorrect because they are based on calculations that do not consider the full cost of reclaiming to the approved postmining land use. WV Coal Association stated that this comment is not consistent with a State official's testimony.

We agree that the approved State program provides that reclamation of bond forfeiture sites must be done in accordance with the approved reclamation plan and must provide for any necessary water treatment. In our evaluation of some bond forfeiture sites, we found that trees have not been planted when woodland was the designated postmining land use. In some cases, this may increase the costs of reclamation. However, in some other cases, we consider it an administrative process breakdown rather than a reclamation deficiency, because permit revision changes were made to the reclamation plan in consultation with the landowner, but without other public participation. A permittee may revise a permit if certain administrative processes are followed and the regulatory authority makes the requisite findings. Similarly, the regulatory authority may revise the reclamation plan of a revoked permit in accordance with proper administrative procedures, including opportunity for public involvement when required.

j. Costs of Reclaiming Active Sites Where All Coal Has Been Removed and AMD Discharges Remain

WVHC stated that WVDEP further failed to calculate the cost of reclaiming ''active'' mine sites that have not mined coal for many years and should be considered to be at a much higher risk of forfeiture than those mines where coal extraction (and an income stream) is continuing. WVHC stated that WVDEP has underestimated the future default rate by ignoring the impact of inactive operations.

WV Coal Association stated that ''[E]xisting West Virginia regulations establish several criteria under which a permit can be granted inactive status. While market conditions is one such instance, for the commenter to claim that because the price of coal is high and three permits have not been reactivated that they are bound for forfeiture is assumption of the greatest proportions and one offered by Morgan to mislead OSM.''

WVHC did not suggest how to consider the cost to reclaim ''active'' mine sites that have been idle for several years. If these sites are in compliance with the backfilling and regrading requirements they should not pose large liabilities for completion of land reclamation. In regard to the potential liability for AMD treatment, we believe, as discussed above, that the Fund will eliminate the deficit and retain a positive cash balance for several years based on historic data. A more thorough analysis will be necessary if the State is to make accurate cost estimates and long-term predictions regarding water treatment. This is one of the responsibilities that the Advisory Council is charged with under law.

5. Federal Counterpart to State Plan

WV Coal Association asserted that since the Plan [7-Up Plan] establishes a mechanism that has no equal in Federal law, and exceeds any program currently in place in any other primacy state, OSM has a duty to finalize the approval of the Plan that the agency first addressed in December 2001.

We disagree with this comment. The State's efforts to improve its ABS, including the development of the 7-Up Plan, specifically relate to the requirements at 30 CFR 800.11(e) concerning alternative bonding systems.

6. Submittal of Comments on the Amendment

WV Coal Association stated that WVHC's motion before a U.S. District Court seeking to have the second comment period declared illegal, make it improper for WVHC to submit comments during the second comment period.

We disagree that the WVHC has waived its right to comment by arguing that the comment period that we opened on December 28, 2001, was invalid. When we opened that comment period, we opened it to all interested persons to provide them additional time to consider all comments submitted to date and so they could submit additional comments on this very complex and important topic.

7. Alternative Methods To Assure Long-Term Reclamation

A commenter stated that history has shown that a per-ton tax on coal will not get abandoned mines reclaimed. The commenter provided the following recommendations to ensure total reclamation of all mined lands and long-term water treatment and to place the financial burden on the coal companies:

1. A cash bond in the amount of the estimated actual reclamation cost should be in place before any mine permit is issued.

2. A per-ton tax on that permit to create a trust to fund any water treatment that might be needed. This trust must be sufficient to fund the water treatment from the interest generated from the trust. If no water treatment or additional reclamation is needed after a 10-year period, the trust can be turned over to the permittee.

3. A per-ton tax on all coal mined to pay for the reclamation of abandoned mine lands that have been previously left unreclaimed.

In response, we note that we have no authority to dictate the specific form of the State's ABS. The State's ABS currently requires a site-specific bond with a $5,000 per acre limit. We believe that the State's site-specific bond plus the State's increased special reclamation tax rates will provide sufficient revenue to ensure complete reclamation of bond forfeiture sites. The State has confronted the issue of long-term water treatment by establishing the Advisory Council and assigning it the task of identifying long-term solutions.

8. Deletion of 25-Percent Limitation at CSR 38–2–12.5.d

The WV Coal Association urged OSM to approve the proposed amendment to CSR 38–2–12.5.d. As noted above in Finding 1, we are approving the amendment.

The WV Coal Association also stated that despite its support of the State's revisions to the ABS, the WV Coal Association maintains that OSM lacks the statutory authority to request changes related to water treatment at bond forfeiture sites, and to characterize the amendment as ''consistent'' with SMCRA and its implementing regulations is incorrect.

We have previously responded to similar WV Coal Association assertions in our final rule decision published on December 28, 2001. See 66 FR 67446, 67451.

Federal Agency Comments

Under 30 CFR 732.17(h)(11)(i) and section 503(b) of SMCRA, on September 28, 2001, and April 26, 2002, we requested comments on these amendments from various Federal agencies with an actual or potential interest in the West Virginia program (Administrative Record Numbers WV–1239 and WV–1299). We responded to a comment from the U.S. Department of Labor, Mine Safety and Health Administration (MSHA) on December 28, 2001 (66 FR 67446, 67452). By letter dated May 13, 2002, MSHA stated that it found no issues or impact on coal miner's health and safety.

Environmental Protection Agency (EPA) Comments

Under 30 CFR 732.17(h)(11)(ii), we are required to obtain written concurrence from EPA for those provisions of the program amendment that relate to air or water quality standards issued under the authority of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or the Clean Air Act (42 U.S.C. 7401 *et seq.*). None of the revisions that West Virginia made and we approved on December 28, 2001, or that we are approving today, pertain to air or water quality standards. Therefore, we did not ask EPA for its concurrence on any of the proposed amendments.

Under 30 CFR 732.17(h)(11)(i), on September 28, 2001, and April 26, 2002, we requested comments from EPA on these amendments (Administrative Record Numbers WV–1239 and WV–1299) . The EPA responded by letter dated November 13, 2001 (Administrative Record Number WV–1247). We responded to EPA's comments on December 28, 2001 (66 FR 67446, 67452). By letter dated May 16, 2002, EPA stated it supports the deletion of the 25-percent limit on expenditure of bond funds for treating water at bond forfeiture sites.

VI. OSM's Decision

Based on the above findings, we are approving the amendment to CSR 38–2-12.5.d submitted to us on April 9, 2002. We are also removing the required program amendments codified at 30 CFR 948.16(jjj) and (lll).

To implement this decision, we are amending the Federal regulations at 30 CFR part 948, which codify decisions concerning the West Virginia program. Our regulations at 30 CFR 732.17(h)(12) specify that all decisions approving or disapproving amendments will be published in the **Federal Register** and that they will be effective upon publication, unless the notice specifies a different date. We are making this final rule effective immediately to expedite the State program amendment process and to assist the State in making its program conform with the Federal standards as required by the Act.

VII. Procedural Determinations

Executive Order 12630—Takings

This rule does not have takings implications. This determination is based on the analysis performed for the counterpart Federal regulation.

Executive Order 12866—Regulatory Planning and Review

This rule is exempt from review by the Office of Management and Budget under Executive Order 12866.

Executive Order 12988—Civil Justice Reform

The Department of the Interior has conducted the reviews required by section 3 of Executive Order 12988 and has determined that this rule meets the applicable standards of subsections (a) and (b) of that section. However, these standards are not applicable to the actual language of State regulatory programs and program amendments because each program is drafted and promulgated by a specific State, not by OSM. Under sections 503 and 505 of SMCRA (30 U.S.C. 1253 and 1255) and the Federal regulations at 30 CFR

730.11, 732.15, and 732.17(h)(10), decisions on proposed State regulatory programs and program amendments submitted by the States must be based solely on a determination of whether the submittal is consistent with SMCRA and its implementing Federal regulations and whether the other requirements of 30 CFR parts 730, 731, and 732 have been met.

Executive Order 13132—Federalism

This rule does not have Federalism implications. SMCRA delineates the roles of the Federal and State governments with regard to the regulation of surface coal mining and reclamation operations. One of the purposes of SMCRA is to ''establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations.'' Section 503(a)(1) of SMCRA requires that State laws regulating surface coal mining and reclamation operations be ''in accordance with'' the requirements of SMCRA, and section 503(a)(7) requires that State programs contain rules and regulations ''consistent with'' regulations issued by the Secretary pursuant to SMCRA.

Executive Order 13211—Regulations That Significantly Affect the Supply, Distribution, or Use of Energy

On May 18, 2001, the President issued Executive Order 13211 which requires agencies to prepare a Statement of Energy Effects for a rule that is (1) considered significant under Executive Order 12866, and (2) likely to have a significant adverse effect on the supply, distribution, or use of energy. Because this rule is exempt from review under Executive Order 12866 and is not expected to have a significant adverse effect on the supply, distribution, or use of energy, a Statement of Energy Effects is not required.

National Environmental Policy Act

This rule does not require an environmental impact statement because section 702(d) of SMCRA (30 U.S.C. 1292(d)) provides that agency decisions on proposed State regulatory program provisions do not constitute major Federal actions within the meaning of section 102(2)(C) of the National Environmental Policy Act (42 U.S.C. 4332(2)(C)).

Paperwork Reduction Act

This rule does not contain information collection requirements that require approval by OMB under the Paperwork Reduction Act (44 U.S.C. 3507 *et seq.*).

Regulatory Flexibility Act

The Department of the Interior certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). The State submittal, which is the subject of this rule, is based upon counterpart Federal regulations for which an economic analysis was prepared and certification made that such regulations would not have a significant economic effect upon a substantial number of small entities. In making the determination as to whether this rule would have a significant economic impact, the Department relied upon the data and assumptions for the counterpart Federal regulations.

Small Business Regulatory Enforcement Fairness Act

This rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. This rule: (a) Does not have an annual effect on the economy of $100 million; (b) Will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; and (c) Does not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. This determination is based upon the fact that the State submittal which is the subject of this rule is based upon counterpart Federal regulations for which an analysis was prepared and a determination made that the Federal regulation was not considered a major rule.

Unfunded Mandates

This rule will not impose an unfunded mandate on State, local, or tribal governments or the private sector of $100 million or more in any given year. This determination is based upon the fact that the State submittal, which is the subject of this rule, is based upon counterpart Federal regulations for which an analysis was prepared and a determination made that the Federal regulation did not impose an unfunded mandate.

List of Subjects in 30 CFR Part 948

Intergovernmental relations, Surface mining, Underground mining.

Dated: May 22, 2002.

Allen D. Klein,

Regional Director, Appalachian Regional Coordinating Center.

For the reasons set out in the preamble, 30 CFR 948 is amended as set forth below:

PART 948—WEST VIRGINIA

1. The authority citation for Part 948 continues to read as follows:

Authority: 30 U.S.C. 1201 *et seq.*

2. Section 948.15 is amended in the table by adding a new entry in chronological order by ''Date of publication of final rule'' to read as follows:

948.15 Approval of West Virginia regulatory program amendments.

* * * * *

Original amendment submission dates	Date of publication of final rule	Citation/description
* * * * * * *		
September 24, 2001 April 9, 2002	May 29, 2002	CSR 38–2–12.5.d.

§ 948.16 [Amended]

3. Section 948.16 is amended by removing and reserving paragraphs (jjj) and (lll).

[FR Doc. 02–13368 Filed 5–28–02; 8:45 am]

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