

STATE OF WEST VIRGINIA

**PRELIMINARY PERFORMANCE REVIEW OF THE
DIVISION OF ENVIRONMENTAL PROTECTION**

Surface Mine Mitigation Program

Projected Impact of S.B. 145 Using Historical Data

**OFFICE OF LEGISLATIVE AUDITOR
Performance Evaluation and Research Division
Building 1, Room W-314
State Capitol Complex**

**CHARLESTON, WEST VIRGINIA 25305
(304) 347-4890**

PE98-20-112

JOINT COMMITTEE ON GOVERNMENT OPERATIONS

House of Delegates

Vicki V. Douglas, Chair
David "O.B." Collins, Vice Chair
Scott G. Varner
Douglas Stalnaker
James E. Willison

Senate

Edwin J. Bowman, Chair
Billy Wayne Bailey Jr., Vice Chair
Oshel B. Craigo
Martha Y. Walker
Sarah M. Minear

Citizen Members

Dwight Calhoun
John A. Canfield
Mayor Jean Dean
W. Joseph McCoy
Willard (Bill) Phillips, Jr.

Aaron Allred, Legislative Auditor
Office of the Legislative Auditor

Antonio E. Jones, Ph.D., Director
Performance Evaluation and Research Division

John Sylvia, Research Manager
Paul Barnette, Research Analyst

December 1998

WEST VIRGINIA LEGISLATURE
Performance Evaluation and Research Division

Building 1, Room W-314
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0610
(304) 347-4890
(304) 347-4939 FAX



Antonio E. Jones, Ph.D.
Director

December 13, 1998

The Honorable Edwin J. Bowman
State Senate
129 West Circle Drive
Weirton, West Virginia 26062

The Honorable Vicki Douglas
House of Delegates
Building 1, Room E-213
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0470

Dear Chairs:

Pursuant to Senate Bill 145 (Regular Session, 1998), relating to mine mitigation, we are transmitting a Preliminary Performance Review of the *Division of Environment Protection - Surface Mine Mitigation Program*, which will be reported to the Joint Committee on Government Operations on Sunday, December 13, 1998. The issue covered herein is "*Projected Impact of S.B. 145 Using Historical Data.*"

We conducted an exit conference with Director Miano and his staff on December 2, 1998, had further teleconferences with selected DEP staff on December 3, 1998, and received an agency response on December 7, 1998.

Should you have any questions, let me know.

Sincerely,

A handwritten signature in cursive script, appearing to read "Antonio E. Jones".

Antonio E. Jones

AEJ/wsc

TABLE OF CONTENTS

Executive Summary	7
Review, Objective Scope and Methodology	9
Issue Area 1: Using Historical Data on 47 Compensation Agreements, S.B. 145 Would Have Resulted in a Loss of Compensated Stream Acreage and a Loss in Compensation.	11
Appendix A: Agency Response	19

LIST OF TABLES

Table 1:	Difference in Compensation <u>if</u> S.B. 145 were in Effect over the last 47 Mitigation Agreements Since March 9, 1996	11
Table 2:	Compensation Revenues & DEP Restoration Expenses	13
Table 3:	Summary of Permits and Those Requiring Mitigation Agreements	13
Table 4:	Flowing Acres of Streams Filled Since 1992	14
Table 5:	Old Guidelines VS S.B. 145	15
Table 6:	Mitigation Agreements Since March, 1996	16
FIGURE 1:	Compensated VS Uncompensated Acreage Under S.B. 145	17

Executive Summary

Section 404 of the Federal *Clean Water Act* (33 USC §1344) requires that when a stream may be altered (or impacted) by surface coal mining operations, the mining company must receive a permit from the Army Corps of Engineers (*404 permit*). However, after receiving a 404 permit and before mining can proceed, Section 401 of the Clean Water Act requires that the State certify that the mining activity will not violate the State's water quality standards (*401 certification*).

The Division of Environmental Protection, through its mitigation program, is the State's 401 certifying agency, authorized under *WV Code §22-1-6*. If it is determined through the mitigation process that impacts to waters cannot be avoided or minimized, then DEP must require compensation from the coal mining company. Compensation is the replacement or substitution of lost resources.

Issue Area 1: Using Historical Data on 47 Compensation Agreements, S.B. 145 Would Have Resulted in a Loss of Compensated Stream Acreage and a Loss in Compensation.

Senate Bill 145 of the 1998 Legislative session raises the threshold for which compensation is required, which means that a greater amount of acreage of water resources can be impacted before compensation is required. If the last 47 mitigation agreements that were executed from March 9, 1996 were under only the guidelines of SB 145, only 6 of the agreements would have been executed, which is an 87% drop in the number of agreements that would have required compensation. The acres of streams impacted by these 6 agreements represent 35% of the acres impacted under the old guidelines. This represents a 65% drop in the amount of acres of streams filled that would have required compensation. The monetary amount of compensation that would have been collected would have been lower by nearly half.

Difference in Compensation if S.B. 145 were in Effect over the last 47 Mitigation Agreements			
	Agreements Under <u>Old</u> Guidelines	Agreements <u>If</u> Under S.B. 145	Difference
Number of Compensation Agreements Executed	47	6	-41 (-87%)
Acreage of Streams Filled Requiring Compensation	82.4 Acres	29.2 Acres	-53.2 (-65%)
Monetary Value of Compensation	\$791,627	\$418,275	-373,352 (-47%)

Review Objective, Scope and Methodology

This preliminary performance review of the Surface Mine Mitigation Program, administered by the Division of Environmental Protection (DEP), is required and authorized by passage of Senate Bill 145 (*WV Code §22-11-7a(7)*) which requires this review during the 1998 interims. Federal law requires that before a stream is altered, a state must certify that the proposed permitted action will not violate the state's water quality standards. This requirement is in Section 401 of the Clean Water Act. The DEP is the certifying agency for 401 certification in West Virginia. Any mining activity requiring DEP certification will be reviewed to determine if the proposed activity avoids or minimizes impacts to state waters (Chapter 22-1-6(6) and Title 47, Series 5A, Section 3).

The **objective** of this review is to determine the direction the State's surface coal mining certification program is heading after passage of S.B. 145. The **scope** of this report focused on the impact which S.B. 145 would have on the number of mitigation agreements, the amount of compensation received, and the total number of compensated acres.

The **methodology** included a review of DEP guidelines, S.B. 145, Federal guidelines, newspaper articles, as well as reports issued by Federal Agencies. Interviews were held with members of DEP, a tour was conducted of the Catenary Surface Mine Operation, and its mitigation project. An analysis was performed on 47 actual mitigation agreements which were executed between the period of March 9, 1996 and June 14, 1998. S.B. 145 was superimposed onto the 47 agreements to determine the change in compensation agreements required, the change in compensated acreage, as well as the change in actual compensation if the bill were in effect during the time these agreements were implemented. This method was chosen because at the time of the audit no mitigation agreements were executed under the guidelines of S.B. 145, which became effective after June 14, 1998. To determine the impact of S.B. 145 on mitigation agreements, the assumption was made that the only guidelines available to DEP to execute mitigation agreements are those contained in S.B. 145. Furthermore, it was assumed that the maximum allowable amount of compensation would be charged. This performance evaluation complied with **Generally Accepted Government Auditing Standards**.

Issue Area 1: Using Historical Data on 47 Compensation Agreements, S.B. 145 Would Have Resulted in a Loss of Compensated Stream Acreage and a Loss in Compensation.

This preliminary performance review of the Surface Mine Mitigation Program, administered by the Division of Environmental Protection (DEP), is required and authorized by passage of Senate Bill 145 (WV Code §22-11-7a(7)) which requires this review during the 1998 interims.

According to S.B. 145, “The director [of DEP] shall review each mitigation agreement signed on or after the ninth day of March, one thousand nine hundred ninety-six, to ensure compliance with all the provisions of this section.” In order to comply with the bill, DEP reviewed and analyzed 47 mitigation agreements that were executed between March 9, 1996 and June 14, 1998. The analysis presented in this performance review relied on data compiled from DEP’s review of these mitigation agreements.

To summarize the findings of this report, if the requirements of SB 145 had been in effect since March 9, 1996 would have resulted in a increase loss of the state’s water resources without compensation, from 82.4 compensated acres to 29.2 compensated acres. Compensation is the replacement or substitution of lost resources. Compensation is required when impacts to water resources cannot be avoided or sufficiently minimized. SB 145 raises the threshold for which compensation is required, which means that a greater amount of acreage of water resources can be impacted before compensation is required. This analysis estimates that if the last 47 mitigation agreements that were executed from March 9, 1996 were under only the guidelines of SB 145, only 6 of the agreements would have been executed, which is an 87% drop in the number of agreements that would have required compensation. The acres of streams impacted by these 6 agreements represent only 35% of the acres impacted under the old guidelines. This represents a 65% drop in the amount of acres of streams filled that would have required compensation. The monetary amount of compensation that would have been collected would have been lower by nearly half (Table 1).

Table 1			
Difference in Compensation if S.B. 145 were in Effect over the last 47 Mitigation Agreements Since March 9, 1996			
	Agreements Under <u>Old</u> Guidelines	Agreements <u>If</u> Under S.B. 145	Difference
Number of Compensation Agreements Executed	47	6	-41 (-87%)
Acreage of Streams Filled Requiring Compensation	82.4 Acres	29.2 Acres	-53.2 (-65%)
Monetary Value of Compensation	\$791,627	\$418,275	-373,352 (-47%)

In addition to the higher compensation threshold, there is a legal issue affecting the mitigation program which will be decided by a lawsuit that was filed in April, 1998. The suit is based on a 1989 court decision which defined excess spoil as “waste” and not fill. Unless these valley fills have an “*economic purpose*”, they are considered disposal of waste. To dispose of waste in state waters is illegal without the applicable permits. If this position is upheld by the court, the types of surface coal mining that has been permitted by the state will be found in violation of federal and state law. This would effectively make S.B. 145 moot since S.B. 145 only applies to mines which dispose of waste in this manner. As a result of the legal dispute, the Army Corps of Engineers placed a temporary moratorium on the issuance of permits that come under SB 145.

The Mitigation Program Prior to S.B. 145

Section 404 of the *Federal Clean Water Act* (33 USC §1344) requires that when a stream may be altered (or impacted) by surface coal mining operations, the mining company must receive a permit from the Army Corps of Engineers (*404 permits*). However, after receiving the 404 permit and before mining can proceed, *Section 401* of the *Clean Water Act* requires that the State certify that the mining activity will not violate the State’s water quality standards (*401 certification*).

The Division of Environmental Protection, through its mitigation program, is the State’s 401 certifying agency, authorized under *WV Code §22-1-6*. The mitigation program is a process defined by federal regulations that attempts to address three issues:

1. Can the mining operation avoid impacts to state waters?
2. Can the mining operation minimize impacts to state waters?
3. If impacts to state waters cannot be avoided or minimized, determine **compensation** for the loss of water resources.

The first two steps, avoiding or minimizing impacts, constitute “*mitigation*.” This must be applied to every coal mining operation that seeks to be certified under the *Section 401* certification process. Mitigation is a primary goal of the process. If it is determined through the mitigation process that impacts to waters cannot be avoided or minimized, then DEP must require compensation from the coal mining company. Compensation is the replacement or substitution of lost resources. DEP allows companies the option of choosing between monetary compensation or an *in-kind* restoration. Monetary compensation will be used by DEP to restore streams or to conduct other environmental enhancement projects. In-kind restoration is the donation of land suitable for lake development or water resources, the development of a lake, or the improvement of a stream habitat.

DEP has been in charge of surface mine mitigation agreements since October, 1992. Since October 1992, DEP has collected \$4,684,286 in compensation revenue and has spent \$2,428,163 on environmental restoration projects.

Table 2 Compensation Revenues & DEP Restoration Expenses		
Fiscal Year	Compensation Received	Restoration Expenses
1993	\$532,601	\$0.00
1994	\$678,732	\$103,338
1995	\$951,715	\$95,401
1996	\$501,945	\$991,637
1997	\$581,322	\$68,814
1998 - 1999*	\$1,437,970	\$1,168,971
Total	\$4,684,286	\$2,428,163
*Current as of September 30, 1998		

Between October 1992 and September 30, 1998, the DEP has issued 610 permits, of which **117 mitigation agreements** were required to be executed (see Table 3). Of the 117 mitigation agreements, 83 agreements selected the monetary option while 34 agreements selected the restoration option.

Table 3 Summary of Permits and Those Requiring Mitigation Agreements	
Mining Permits Issued Since 1992	610
Mitigation/Compensation Agreements Executed	117
Agreements Selecting Monetary Option	83
Agreements Selecting Restoration Option	34

Over the same period, there have been over 139 flowing acres or over 6 million square feet of streams filled (see Table 4).¹ This includes 116.9 acres of *permanent* loss and 22.5 acres of *temporary* loss.²

Table 4 Flowing Acres of Streams Filled Since 1992		
Permanent Acres	Temporary Acres	Total Acres
116.9	22.5	139.4

Old Guidelines Versus S.B. 145

Although the state's mitigation program is required by federal law and authorized by state code, much of the mitigation program was established by internal administrative guidelines prior to SB 145. For example, the amount of compensation and the compensation thresholds were established by internal policy. Through passage of SB 145, important aspects of the mitigation program are now in statute.

Table 5 gives a side-by-side comparison of the old internal guidelines and SB 145. Previously established guidelines identified two types of losses, **permanent** and **temporary**. **Permanent losses** are those losses where the stream is permanently covered. **Temporary losses** are losses where either the fill is temporary (as in the case of a stream crossing) or where the stream has been relocated and a temporary loss of aquatic habitat or stream productivity (rate of flow) occurs which will over time be relocated to the new stream.

S.B. 145 also recognizes two types of losses, **permanent** and **isolated**. **Permanent losses** are defined similarly to the old guidelines. However, **isolated waters** are not defined under S.B. 145 and do not have a monetary compensation value. **Isolated water loss** requires compensation in the form of In-Kind restoration (i.e. lake development or stream habitat improvement). Furthermore, **isolated losses** are clearly not the same as **temporary losses**, and temporary losses are not discussed under S.B. 145. Consequently, **temporary losses are not compensated for under the bill**, whereas, the old guidelines required compensation at a rate of \$20,000 for each acre impacted per 5 year term, or develop a lake the same size as the acreage of water resource lost or impacted.³

¹A flowing acre is defined as the length of the stream impacted multiplied by the average width as measured from ordinary high watermark.

²Valley fills can result in permanent or temporary loss of the stream and its habitat. A temporary loss results from a re-directed stream that over time will be restored. Temporary losses also require compensation.

³Most mitigation agreements involve permanent loss of water resources. As Table 4 shows, only 16% (22.5 acres) of total impacted acres were temporary losses.

**Table 5
Old Guidelines VS S.B. 145**

Old Guidelines	S.B. 145
Covered both quarries and coal mining activities eligible for several types of Nationwide and Individual permits issued by the Army Corps of Engineers.	Only covers coal mining activities eligible for U.S. Army Corps of Engineer Nationwide permit numbers 21 and 26. ⁴
Compensation to DEP when permanent impacts to streams is greater than 250 watershed acres. ⁵	Compensation when permanent stream impacts are equal to or greater than 480 watershed acres.
Compensation to DEP when impacts to a wetland of 1/3 acre or greater in size.	No compensation for wetland impacts.
Compensation for permanent impacts to streams at a monetary rate of \$200,000/acre or an in-kind ratio of 2:1	Compensation for permanent impacts to streams at a monetary rate that <u>may</u> not exceed \$225,000/acre or an in-kind ratio of 2:1
Compensation for temporary impacts to streams at a monetary rate of \$20,000/acre per 5 year term or an in-kind ratio of 1:1.	No discussion of temporary losses to streams. Discussion of "isolated waters" but no definition. No monetary option and in-kind ratio of 0.5:1.
No requirements to certify completed compensation work.	Requires a professional engineer to certify compensation work completed.
No reporting requirements to the Legislature.	Preliminary performance review, mitigation study, progress report twice a year, and an annual report should all be submitted to the Joint Committee on Government.
Up to 1 year (365 days) to certify an activity.	20 working days to determine an application complete and 60 working days to issue the certification.
Norequirementstodevelopamitigationmanual.	Director is required to confer with representatives to develop a manual for mitigation options.
Class I legal ad (one time 30 day comment period) as public notice.	Once a week for four consecutive weeks with a 30 day comment period for public notice.

⁴U.S. Army Corps of Engineer Nationwide Permits 21 and 26 refer to 404 permits and give coal companies the authority to dispose of fill into waters of the United States.

⁵The term "watershed" refers to the stream drainage basin contributing flow to the furthest downstream disturbance.

In cases of **permanent** losses, the old guidelines required compensation from the mining company when **250 watershed acres or more was impacted** by excess spoil valley fill. Under S.B. 145 this would not occur unless the permanent impacted area is **480 watershed acres or more**. The monetary compensation was \$200,000 per acre of stream loss. Under S.B. 145 compensation may not exceed \$225,000 per acre of stream loss.⁶ This effectively nearly doubles the watershed area a mining company is allowed to impact without compensation.

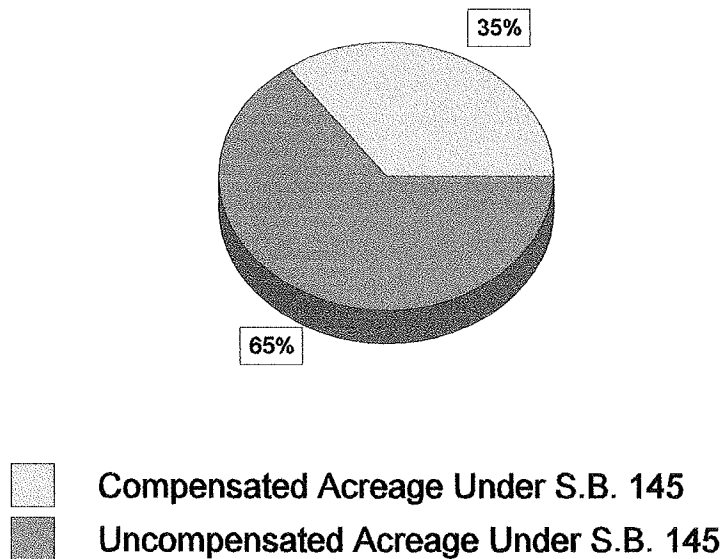
To further emphasize the difference between the old guidelines and S.B. 145, Table 6 shows a breakdown of the 47 mitigation agreements since March of 1996 used in this analysis. Twenty-three projects involved impacted areas that were more than 250 watershed acres (compensated for under old guidelines) but less than 480 watershed acres (not compensated for under S.B. 145). Five projects involved impacted areas in excess of 480 watershed acres which would have been compensated for under both procedures, one permanent stream crossing which would have been compensated for under both procedures, and twenty projects involved temporary impacts which would have been compensated for under the old guidelines but not under S.B. 145.

Table 6 Mitigation Agreements Since March, 1996	
Mitigation agreements between March 9, 1996 and June 14, 1998	47
Permanent impacts less than 480 watershed acres, but more than 250 watershed acres.	23
Permanent impacts in excess of 480 watershed acres.	5
Permanent stream crossing	1
Contracts which involve temporary displacement.	20
<i>*Note that agreements may contain one or more types of losses.</i>	

As Figure 1 illustrates, the number of acres of streams filled that would be compensated for under SB 145 is only 35% of what actually is compensated for under the old guidelines. This would represent a 65% drop in compensated acres.

⁶*This analysis assumed the maximum compensation rate would be imposed.*

Figure 1
Compensated VS Uncompensated Acreage Under S.B. 145



Governor Orders Old Guidelines Be Followed Temporarily When Possible

The passage of S.B. 145 caused a great deal of public interest and concern at a public hearing on August 3, 1998 which prompted the Governor to write a letter to the Director of the Division of Environmental Protection on August 6, 1998. In that letter the Governor wrote:

*After reflecting upon some of the concerns voiced at the recent public hearing held by the Mountaintop Mining Practices Task Force, I believe that **the Division of Environmental Protection should issue permits, whenever possible, in the same manner as it did prior to the passage of S.B. 145. You have a statutory obligation to administer the law, and I expect you to do so; however, where the law provides for the director to exercise discretion, I believe that it should be exercised in a fashion consistent with department practices before the passage of S.B. 145....I believe this practice should be continued until the Legislature and I have had the opportunity to consider the findings of the Mountaintop Mining Practices Task Force.***

Conclusion

For agreements executed between March 9, 1996 and June 14, 1998 alone the state would have incurred an 87% loss in compensated agreements, a 65% reduction in compensated acreage, and a 47% reduction in monetary compensation. Until recently, new permits were not being issued because of a moratorium put on permit number 21 by the Army Corps of Engineers. Currently, mitigation agreements are being executed according to a hybrid of old guidelines and S.B. 145. Only agreements which permanently impact a watershed of greater than 480 acres are being executed under guidelines contained in S.B. 145. In addition, an impending court decision could dramatically alter the future of surface mining and its regulation.

**APPENDIX A:
Agency Response**



DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

10 McJunkin Road
Nitro, WV 25143-2506

MICHAEL P. MIANO
DIRECTOR

December 7, 1998

Mr. Antonio E. Jones, Director
West Virginia Legislature
Performance Evaluation and Research Division
Building 1, Room W-314
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305

Dear Mr. Jones:

My staff and I have reviewed the Preliminary Performance Review of the Division of Environmental Protection's Surface Mine Mitigation Program. We agree with the conclusions of the report. We find the assessment of the program to be accurate and complete.

If you should have any questions or need further information please do not hesitate to contact me at (304)-759-0515.

Sincerely,

A handwritten signature in black ink that reads "Michael P. Miano".

Michael P. Miano, Director
Division of Environmental Protection

