WEST VIRGINIA
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ADMINISTRATIVE LAW DIVISION

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OFFICE OF WEST VIRGINIA
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NOTICE OF AGENCY APPROVAL OF A PROPOSED RULE AND FILING WITH THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

AGENCY: Divis Environmental Protection-Office Mining & Reclamation TITLE NUMBER: 38

CITE AUTHORITY: 22-1-3(a) and 22-4-1

AMENDMENT TO AN EXISTING RULE: YES ___ NO X

IF YES, SERIES NUMBER OF RULE BEING AMENDED: _____

TITLE OF RULE BEING AMENDED: _____

IF NO, SERIES NUMBER OF RULE BEING PROPOSED: 3

TITLE OF RULE BEING PROPOSED: "Rules for Quarrying and Reclamation"

THE ABOVE PROPOSED LEGISLATIVE RULE HAVING GONE TO A PUBLIC HEARING OR A PUBLIC COMMENT PERIOD IS HEREBY APPROVED BY THE PROMULGATING AGENCY FOR FILING WITH THE SECRETARY OF STATE AND THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE FOR THEIR REVIEW.

Darrie J. Chambers

Authorized Signature

$21.20

Executive Office
#10 McJunkin Road
Nitro, WV 25143-2506
Telephone No: (304)759-0575
Fax No: (304)759-0526

West Virginia Bureau of Environment

Cecil H. Underwood
Governor

Michael C. Castle
Commissioner

August 23, 2000

Ms. Judy Cooper
Director, Administrative Law
Division
Secretary of State's Office
Capitol Complex
Charleston, WV 25305

RE: 38CSR3 - "Rules for Quarrying and Reclamation"

Dear Ms. Cooper:

This letter will serve as my approval to file with your Office the above-referenced Legislative rule as "Notice of Agency Approval of a Proposed Rule and Filing with the Legislative Rule-Making Review Committee."

Your cooperation in the above request is very much appreciated. If you should have any questions or require additional information, please call Carrie Chambers in my Office at 759-0515.

Sincerely,

Michael C. Castle
Commissioner

MCC:cc

cc: Rocky Parsons
Carrie Chambers

QUESTIONNAIRE

(Please include a copy of this form with each filing of your rule: Notice of Public Hearing or Comment Period; Proposed Rule, and if needed, Emergency and Modified Rule.)

DATE: August 29, 2000

TO: LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

FROM:(*Agency Name, Address & Phone No.*) Division Environmental Protection, Office Mining & Reclamation, #10 McJunkin Rd., Nitro, WV 25143

Phone - Carrie Chambers, Director's Office - 759-0515

LEGISLATIVE RULE TITLE: 38CSR3 - "Rules for Quarrying and Reclamation"

1. Authorizing statute(s) citation 22-1-3-3(a) and 22-4-1

2. a. Date filed in State Register with Notice of Hearing or Public Comment Period:

July 20, 2000

b. What other notice, including advertising, did you give of the hearing?

Statewide News Release by DEP's Public Information Office/DEP's InDepth Newsletter with statewide circulation

c. Date of Public Hearing(s) ***or*** Public Comment Period ended:

August 21, 2000

d. Attach list of persons who appeared at hearing, comments received, amendments, reasons for amendments.

Attached X No comments received _____

e. Date you filed in State Register the agency approved proposed Legislative Rule following public hearing: (be exact)

August 29, 2000

f. **Name, title, address and <u>phone/fax/e-mail numbers</u>** of agency person(s) to receive all *written correspondence* regarding this rule: (Please type)

Rocky Parson, Office Mining & Reclamation, #10 McJunkin Rd., Nitro, WV 25143

Phone, 759-0510 - fax, 759-0528, e-mail RParsons@mail.~~dep.wv.us~~ .dep.State.WV.US

Carrie Chambers, Exec. Asst., Director's Office, #10 McJunkin Rd., Nitro, WV 25143

Phone - 759-0515, fax - 759-0526, e-mail, CChambers@mail.~~dep.wv.us~~ .dep.state.wv.us

g. **<u>IF DIFFERENT</u> FROM ITEM 'f'**, please give **Name, title, address and phone number(s)** of agency person(s) who wrote and/or has responsibility for the contents of this rule: (Please type)

3. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

N/A

b. Date of hearing or comment period:

_____

c. On what date did you file in the State Register the findings and determinations required together with the reasons therefor?

_____

d. Attach findings and determinations and reasons:

Attached _____

BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF MINING AND RECLAMATION

BRIEFING DOCUMENT

Rule Title: 38CSR3 - "Rules for Quarry and Reclamation"

A. AUTHORITY: §22-1-3, 22-4-1, 22-1-3(a) and 29A-3-15(a)

B. SUMMARY OF RULE: This proposed Legislative rule establishes general and specific requirements for quarrying and reclamation operations, including permit applications, bonding, blasting, drainage control, method of operation, excess spoil disposal, revegetation, mapping, transfer of permit rights, public hearings, permit renewals, modifications, inspections and enforcement and state and federal compliance.

C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE: The proposed rule specifies the requirements for implementation and compliance with the newly-enacted HB 4055, Quarry Reclamation Act, which became effective June 8, 2000. Without these rules, the ability to issue permits, conduct inspections and monitor compliance would be severely hampered.

D. FEDERAL COUNTERPART REGULATIONS - INCORPORATION BY REFERENCE/DETERMINATION OF STRINGENCY:

There is no federal counterpart regulation.

E. CONSTITUTIONAL TAKINGS DETERMINATION:

In accordance with §22-1A-1 and 3(c), the Director has determined that this rule will not result in taking of private property within the meaning of the Constitutions of West Virginia and the United States of America.

F. CONSULTATION WITH THE ENVIRONMENTAL PROTECTION ADVISORY COUNCIL:

These proposed rule amendments were discussed during the meeting of the Environmental Protection Council on July 6, 2000. Those minutes are attached.

MINUTES

ENVIRONMENTAL PROTECTION ADVISORY COUNCIL

July 6, 2000, Director's Conference Room, Nitro

The twenty-first meeting of the DEP Advisory Council was held Thursday, July 6, 2000, in the Director's Second Floor Conference Room located in Nitro. Chairman Mike Castle called the meeting to order at 10:00 a.m.

ATTENDING:

Advisory Council Members:

Mike Castle, Chairman
Lisa Dooley
Jacqueline Hallinan
Bill Raney
Rick Roberts
Bill Samples

Environmental Protection:

Greg Adolfson	Ava King
John Ailes	Brian Long
John Benedict	Pam Nixon
Al Blankenship	Rocky Parsons
Carrie Chambers	Jennifer Pauer
Dick Cooke	Cap Smith
Mike Dorsey	Randy Sovic
Andy Gallagher	Charlie Sturey
Randy Huffman	Darcy White
John Johnston	

1) Review and Approval of April 6, 2000 Minutes. The April 6 Minutes were approved with note of two minor revisions.

2) Discussion of Proposed Rule Amendments - 2001 Legislative Session. In accordance with WV Code §22-1-1(c), and DEP's rule-making procedure policy that was implemented in 1998, and included involving DEP's Advisory Council in DEP's rule-making process as early as possible to enable the Council to review, comment, and make recommendations to the Director on the proposed Legislative rules before they are filed for public

hearing, the following proposed rules were brought to the Council's attention.

John Benedict, Deputy Chief of the Office of Air Quality (OAQ), reviewed the following OAQ rules:

- 45CSR1 - "NO_x Budget Trading Program as a Means of Control and Reduction of Nitrogen Oxides"
- 45CSR6 - "To Prevent and Control Air Pollution From Combustion of Refuse"
- 45CSR15 - "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 61"
- 45CSR16 - "Standards of Performance for New Stationary Sources Pursuant to 40 CFR part 60"
- 45CSR23 - "To Prevent and Control Emissions From Municipal Solid Waste Authorities"
- 45CSR25 - "To Prevent and Control Air Pollution From Hazardous Waste Treatment, Storage, or Disposal Facilities"
- 45CSR30 - "Requirements for Operating Permits"
- 45CSR34 - "Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 CFR Part 63"

In discussion of 45CSR1, John explained to the Council that they did not have the companion rule (which is 45CSR26) to this proposed rule amendment, but Council will be provided a copy of the proposed rule when the draft is complete. Both rules have been drafted as a response to EPA's NO_x SIP Call. Failure of states to respond to the SIP Call will result in a NO_x federal implementation plan or federal program to reduce NO_x emissions under Section 126 of the CAA. John explained that OAQ is late in drafting both rules because they were waiting until several issues were settled in federal court. EPA is now requiring, and the federal courts concurred, that states develop rules and meet the conditions of the SIP Call by October 28, 2000. EPA's SIP Call affects major utility sources, cement kilns, and large industrial-type boilers (those exceeding 250 lbs/mmBtu). The SIP Call originally included internal combustion engines.

45CSR1 establishes standards specifically for non-utility boilers, and follows EPA's model rule that states are to use in developing their SIPS. The model rule incorporates standards to

allow sources to trade emissions between states. Therefore, states do not have a lot of flexibility to adjust their state-specific rules, if they want their sources to participate in a national NO_x budget-trading program.

John informed the Council that **45CSR15** adopts by reference the new federal provisions for emission standards for hazardous air pollutants (NESHAPS), and other regulatory requirements as outlined in 40 CFR Part 61, as of June 1, 2000. This also applies to **45CSR16**, which specifically includes associated reference methods, performance specifications, other test methods, and a minor correction to the reporting requirements for industrial-commercial-institutional steam generating units.

45CSR6 prevents and controls particulate matter air pollution from the combustion of refuse by the prohibition of open burning. This proposed rule also establishes weight and visible emission standards for incinerators and incineration, and is part of the West Virginia State Implementation Plan (SIP) approved by EPA. The rule does not prohibit bonfires, campfires, or other forms of open burning for the purposes of personal enjoyment and comfort, but establishes standards for open burning. The proposed revisions are intended to exempt certain flares and flare stacks from the requirement to obtain a permit under 45CSR13.

45CSR23 - This rule was first promulgated approximately three years ago, and for the most part adopts new federal standards by reference. There is a specific plan that each state puts together for "existing sources" that OAQ has done for previous rule versions, and the plan for West Virginia has been approved by EPA.

45CSR25 - This rule establishes a program of air quality regulation over the treatment, storage, and disposal of hazardous wastes. John informed Council that this proposed rule amendment is incorporating additional federal requirements promulgated by EPA, as of June 1, 2000. There is a shift from the Resource Conservation and Recovery Act (RCRA) requirements into the Clean Air Act (CAA) programs that OAQ operates. Many of the RCRA provisions previously contained in this rule are now being shifted to 45CSR34 (which will be discussed later in the meeting). John said this proposed rule amendment is also necessary to maintain consistency with the Office of Waste Management's current rule - 33CSR20.

45CSR26 (copy not provided for Council at this time) specifically addresses NO_x reduction requirements for electric generating units. This rule deviates somewhat from EPA's model rule, but follows the Governor's Coalition proposal. EPA's model rule requires electric generating units .15 lb/mmBtu NO_x limits,

which is roughly an 85% reduction in NO_x emissions. Whereas, the Governor's coalition proposal requires .25 lb/mmBtu NO_x limits, or 65% reduction from their 1999 emissions.

45CSR30 establishes a comprehensive air quality operating permits program consistent with the requirements of Title V of the federal Clean Air Act and 40 CFR Part 70. These proposed amendments will incorporate various corrections and revisions associated with the November 1995 Federal Register Notice. John said OAQ has deferred making these changes until now in anticipation of additional changes they believe EPA will make in Part 70. There also has not been a great deal of concern since OAQ has received interim approval of the program since 1994; however, EPA was recently sued for issuing these interim approvals. This put OAQ in the position of amending the rule to comply with the November 1995 requirements, so that OAQ can receive final approval from EPA. John said the rule may need to be modified again in the near future when (and if) EPA modifies the Part 70 requirements.

45CSR34 - This rule provides authority for the Director to determine and enforce case-by-case maximum achievable control technology (MACT) standards for major hazardous air pollutant sources, in the absence of a federal standard under certain circumstances, as required for permit program approval under Title V of the CAA. John said this proposed amendment does delete the requirement that OAQ do a case-by-case MACT analysis for sources that modify. He said this is a fairly significant change in the rule. Previously, and even under OAQ's Title V program, sources that do even slight modifications and were to eventually receive a MACT standard from EPA, were required to make some kind of guess as to what that standard was under such modification, and then do a case-by-case analysis to make that source comply with what everybody thought would be the ultimate MACT standard for that source. EPA was sued over this particular requirement, and has since removed the requirement from the Title V program. As mentioned earlier in the meeting, OAQ is also proposing incorporating the provisions in 45CSR25, pertaining to hazardous waste combustors, into this rule.

After discussions and questions concerning OAQ's proposed rules, Council recommended the following to Chairman Castle:

- *Bill Raney deferred to Ray Joseph, representing the natural gas industry, for questions concerning Section 6 of 45CSR6 (To Prevent and Control Air Pollution From Combustion on Refuse) requirements for Permits before the installation and use of emergency flares. The concern from Mr. Joseph was that in certain situations emergency flares would exceed permitting trigger levels requiring a permit pursuant to 45CSR13. John Benedict concurred that permits would be required under those*

circumstances. However, that should not be that much of a burden since the emissions from a majority (90%) of emergency flares used in the natural gas industry would be below permit trigger levels. It was noted that Section 6 was specifically revised to allow the use of emergency flares for the natural gas industry, and that others in OAQ were more directly involved in drafting the specific language in Section 6. Mr. Benedict recommended that proposed rule 45CSR6 go to public notice as drafted, and that the OAQ would meet with representatives of the natural gas industry to further discuss their concerns, and possibly consider revisions in Section 6.

Bill Raney asked if the Administrative Procedures Act requires Fiscal Notes to be completed as to the implications of the rule on the regulated community. Carrie Chambers advised Mr. Raney that fiscal notes are prepared for each rule before they are filed for public hearing, but the fiscal note requires information on the cost to the state in implementing the proposed rules, not on the regulated community. The Fiscal Notes are a work-in-progress, and will be submitted to Council after they are completed. Mr. Raney expressed his concern by stating that he has a problem in approving the proposed rules without the Council reviewing these documents beforehand. He said agencies have typically been known to crank out the standard responses to the fiscal notes, which leads to problems during the Legislative Rule-Making process. Bill Samples said he wasn't sure if the Council has a right to approve or disapprove the proposed rules, but only that the Director is to consult with Council on the proposed amendments, and then consider their comments. Mr. Raney stated that he would still like his concerns noted and included in the minutes that will be filed with the proposed rules.

Mr. Raney said he would also like to ask why there is nothing on the agenda concerning the Environmental Quality Board's (EQB) Water Quality Standards rule. Carrie Chambers explained that she has included a copy of EQB's rule (and also three of the Solid Waste Management Board's proposed rules), for Council's review, in the notebooks containing DEP's rules. She went on to explain that since the Boards have their own rule-making authority under §22B-3-4, they are not required to go before the Advisory Council during the rule-making process.

Mr. Raney said that DEP has a huge obligation in regards to water quality standards, regardless of who has the rule-making authority. He also said that the rules as proposed are huge, and the implications to the regulated community are immense.

Chairman Castle said he would try to find someone from OWR or EQB to discuss EQB's rule later in the meeting.

- 60CSR4 - "Awarding of West Virginia Stream Partners' Program Grant Rule."

Jennifer Pauer, Program Coordinator for the Stream Partners' Program, briefed Council members on the proposed amendments to **60CSR4**. Jennifer said this rule was filed as an emergency rule in March. After one year of implementing the rule, it was discovered that the rigid spending caps contained in the original rule made it difficult to implement as intended by §20-13-4. The proposed amendments will loosen these spending caps, and therefore make it easier for grant recipients to complete their watershed improvement projects. The rule also contains minor technical cleanup.

After discussion and questions from the Council, there were no substantive recommendations made to the Director concerning the proposed amendments to 60CSR4.

- 199CSR1 - "Surface Mining Blasting Rule"

Darcy White, Office of Explosives and Blasting (OEB), briefed Council on 199CSR1. Darcy explained that many of the proposed amendments to the Surface Mining Blasting rule are technical cleanup in nature and also involve changing the order of some provisions to improve clarity. Sections covering inspections and enforcement and appeals were extracted from portions of existing 38CSR2, the Surface Mining and Reclamation rule. These sections are being amended into the current rule to ensure OEB has authority to enforce a program that will satisfy OSM requirements. Another section extracted from 38CSR2 deals with pre-blast survey requirements, and is necessary if OEB is to gain OSM approval of the proposed rules. Darcy said that subsection 3.11 also contains a proposed revision that allows the Director to further restrict blasting on a case-by-case basis as an alternative to prohibiting blasting altogether. To correspond with the blaster's certification rules approved by OSM, and to help improve certified blaster's professionalism and knowledge, the requirements for blaster's certification is also being proposed as an amendment to this rule.

Larry Harris, Advisory Council member, was unable to attend the meeting; however, he expressed the following comments on 199CSR1 by e-mail. He asked whether these blasting rules will also apply to the quarry bill and rules. He said that in the Surface Mining Blasting rule there seems to be some consideration of the premining groundwater/wells. This presumes that any

taking of this water right from nearby landowners is cause for a claim. Is this also true for limestone quarries?

Darcy responded by saying that no, 199CSR1 applies only to coal mining. Blasting requirements for quarries are addressed in §22-4 (revised during the past legislative session, and effective this July). Rocky Parsons is currently working on a rules package as required by this legislation. Until those are promulgated, there is no change in blasting requirements for quarries.

After discussion and questions from the Council, there were no recommendations made to the Director concerning the proposed amendments to 199CSR1.

John Johnston, Chief of the Office of Oil and Gas, discussed the following proposed rules.

- **35CSR4 - "Oil and Gas Wells and Other Wells"**

- 35CSR7 - "Certification of Gas Wells"

John told Council that there are three proposed amendments to 35CSR4 and one to 35CSR7 that are both fairly straightforward. He said the proposed amendments in **35CSR4** will: 1) allow the plats to be submitted electronically. This is the first step in relation to authorizing permitting electronically for oil and gas wells; 2) will apply to the procedure for well transfer. These proposed amendments will eliminate the pre-circular, and cut the paperwork and mailing in half that the Office of Oil and Gas must perform in the transfer process. This will also allow the transfer of well responsibility to occur in a more timely manner; and 3) will waive the new certification for the reuse of plats when applying for plugging permits.

35CSR7 - The Federal Energy Regulatory Commission is proposing to reinstate certain regulations regarding well category determination under the Natural Gas Policy Act of 1978, Section 503. This section allows natural gas producers to obtain tax credits under Section 29 of the Interval Revenue Code. Section 503 first requires a determination by the local regulatory agency that a well is producing one of the types of gas eligible for the Section 29 tax credit. The promulgation of these proposed rules will enable the Office of Oil and Gas to review and conduct the first determination.

After discussion and questions from the Council, there were no substantive recommendations made to the Director concerning the proposed amendments to 35CSR4 and 35CSR7.

The following Office of Waste Management rules were discussed:

- **33CSR3 - "Yard Waste Management Rule"**
- **33CSR5 - "Waste Tire Management Rule"**
- **33CSR20 - "Hazardous Waste Management Rule"**
- **33CSR32 - "Underground Storage Tank Insurance Fund"**

Dick Cooke, Assistant Chief, Office Waste Management (OWM), briefed Council on **33CSR3**. He said OWM has taken a policy statement, that with a change in the yard waste laws approximately two years ago, provided for the Director to provide for reasonable and necessary exceptions to the prohibition of yard waste in landfills. This provision was not incorporated into the rule as the Legislature intended at that time. This proposed amendment incorporates that exception into the rule, and will allow West Virginia residents to dispose of small quantities of domestic yard waste in solid waste landfills, where there is no other option available.

Dick Cooke explained to Council that SB 427 (the Tire Bill) mandated that emergency rules be promulgated under **33CSR5**. The proposed emergency rule, among other amendments, will allow the disposal of waste tires in solid waste landfills, but only when the state agency authorizing the remediation or cleanup program has determined there is no reasonable alternative available. The proposed amendments also adds permitting or other requirements for salvage yards, waste tire dealers, waste tire transporters, and commercial landfill facilities.

Mike Dorsey, Assistant Chief, OWM, next discussed **33CSR20**. He explained the rule is being amended to adopt by federal reference the 1999 changes made to 40 CFR Parts 260 through 279. Those amendments include Hazardous Waste Management System: Modification of the Hazardous Waste Program, Hazardous Waste Lamps, and 180-day Accumulation Time Under RCRA for Waste Water Treatment Sludges from the Metal Finishing Industry. These amendments are less stringent than federal regulations and are intended to assist the regulated community, and encourage recycling and waste minimization.

Mike said OWM has two rule amendments this year that deal with underground storage tanks. The first, **33CSR30**, applies to a very small segment of the population. This rule, as well as federal EPA requirements, requires that all underground storage tanks (UST) have corrosion protection by December 22, 1998. Many UST

systems were upgraded to meet the standards rather than new USTs being installed; however, the UST inspectors are finding that many of the systems were not installed correctly. Since the current rules do not specifically require certification of persons who install corrosion protection, the burden falls solely on the UST owners and/or operators to correct the system. This proposed amendment should prevent this from continuing in the future.

33CSR32, OWM's final proposed rule, deals with the Underground Storage Tank Insurance Fund. This rule requires that accrued interest on the UST Insurance Trust Fund Capitalization Fund remain in that fund. The UST Administrative Fund has been depleted, and the annual registration fee assessment no longer generates enough revenue to support the UST program. The expenditures from the UST Administrative Fund are used as the required match for the federal grant. Unless more revenue is deposited in the UST Administrative Fund, there will be insufficient funds to pay personnel and other operating costs. The proposed amendments to this rule will allow the transfer of the interest money and alleviate the need to increase the annual registration fees. Mike said this amendment has the full support of the UST Advisory Committee.

After discussion of OWM's proposed rules, the following amendment to 33CSR5 (the Waste Tire Disposal rule) was offered by Counsel:

Bill Samples said that section 3.1.a indicates that a permit is required for persons who generate waste tires, but he couldn't find a definition of "generator," and this could be confusing when trying to interpret the rule. Cap Smith, Chief of OWM, said that is a very good point, and it will certainly be taken into consideration during the public hearing/comment period timeframe.

The following Office of Mining and Reclamation rules were discussed:

- **38CSR2 - "WV Surface Mining Reclamation Rule"**
- **38CSR3 - "Rules for Quarrying and Reclamation"**

John Ailes, Assistant Chief, OMR, briefly described the proposed amendments to **38CSR2**, and noted that most of the amendments deal with Office of Surface Mining program amendments.

After discussion/questions concerning 38CSR2, the following comments were made by Council:

In Section 14.15.f, OMR is proposing to tie contemporaneous reclamation to reclamation liability. The proposed amendment stated that the reclamation liability cannot exceed the bond posted for the site. Bill Raney stated his concern with limiting the area to be disturbed based upon liability. He questioned who would be determining reclamation liability, and how. He said that he understands the reasoning, but would like to go on record as being "cautiously reserved," and additional comments would be forthcoming during the public hearing/comment period.

The proposed amendment to strike Section 23, which deals with coal extraction as an incidental part of development of land for commercial, residential, industrial or civic use, was questioned by Council. John explained to Council that this provision was amended into the rule a few years ago, but never approved by OSM, and therefore deleted from the rule mainly as a cleanup. Bill Raney said that he is hesitant to see the Section deleted from the rule since it is still in DEP's statute, and has been beneficial to businesses several times throughout the state. After further discussion, Chairman Castle agreed to reinstate Section 23 and will work with OSM to seek program approval.

Rocky Parsons, OMR Assistant Chief, discussed the newly-proposed Quarry mining rules, 38CSR3, authorized in HB 4055, effective June 8. He said that the Statue was developed through the stakeholders' process, and the rules have been drafted the same way. DEP intends to file the rules as "Emergency," and at the same time file the rules to go through the normal legislative rule-making process. He said it is still a working document, but any changes made will be as a result of the stakeholders' process.

After discussion/questions on 38CSR3, the following comments are noted by Council members:

Mr. Larry Harris commented by e-mail on 38CSR3. He stated that his concerns for quarries are "related to degradation of nearby streams and water tables. Where limestone is located the quality of streams is generally high, often being trout streams. Quarries can alter the quality of the stream through siltation, and the quantity through alterations of the water table due to blasting. Hence, we want to make sure that the rules adequately address these two issues. I think that the water quality baseline studies should include a bottom fines analysis of receiving streams. Duffield of the Forest Service has established a direct relationship between the % of fines in stream sediment and the biological productivity of the stream. Having a baseline value for the receiving stream, and requiring monitoring to assure that this figure is not increased to the

point where productivity is altered, would be a suitable protection for the stream - Part of 3.5 of the proposed rules.".

Mr. Harris also noted his objection to calling streams "Natural Drainways" in subsection 2.17 of the definitions - He stated that "this nomenclature lowers the status of streams to drains, which are essentially industrial conduits or pipes. Very often these streams are manipulated in a way that destroys habitat and degrades the productivity of that stream."

Rocky responded that he will take these comments to the next stakeholders' meeting for their consideration, including a possible rewrite of 2.17.

Mr. Harris also asked if there are any preblast assessments or surveys of the groundwater level. Rocky responded by saying that preblast surveys do require a sampling of the water wells. With, quarries, operations in existence now have a year to do a preblast survey to the nearest protected structure within 1,000 feet of the blasting area. A new permit has to do a preblast survey for any structure within 1,500 feet of the blasting area, as opposed to 1/2 mile with coal.

Bill Samples pointed out section 7.4.b., that deals with sediment control, seems to be awkwardly worded. As it is worded, the Director has to make a very definitive determination on something that the applicant only has to have a reasonable likelihood of. Chairman Castle agreed with this comment, and the rule will be amended accordingly.

Mr. Samples also noted in 7.4.c., that normally in an environmental regulation when something has to be removed, you say it has to be disposed of in an appropriate manner. Chairman Castle agreed with this comment and amendment to this section.

3. Open Discussion.

Chairman Castle introduced Libby Chatfield, Technical Advisor for the Environmental Quality Board. Chairman Castle thanked Libby for taking the time to appear before Council to discuss 46CSR1, EQB's Water Quality Standard Rule. Randy Sovic, DEP's Office Water Resources, also participated in the discussion.

After discussions/questions concerning the proposed EQB rule, the following comments are noted from Council members:

Bill Raney said that even though the Boards (the Environmental Quality Board and Solid Waste Management Board) are not required

to come before the Council with their proposed Legislative rules, he would like to go on record as being "absolutely in opposition" to the proposed Groundwater Quality Standards' rule amendments until a full-blown, socio-economic impact statement is done. He said he does take exception to the fact that the Board can autonomously go forward with the rules without coming to the Advisory Council, and that he believes the obligations and costs will be enormous, both to the state and to industry.

Lisa Dooley stated that she is in complete agreement with Mr. Raney, and would also like to go on record as being opposed to EQB's proposed rule. She said that the proposed rule amendments, especially as they relate to the economic development part, very much concern her. She believes any economic development in West Virginia will be subject to the state's anti-degradation policy. And that policy should be reviewed and compared to surrounding states so that it is not detrimental for businesses and municipalities.

Bill Samples said that there is a multitude of concerns with this rule amendment, and that industry certainly has a major concern with it. He said that other states with anti-degradation rules may not have brought things to a stop, but certainly delayed them. He said that he would also like to go on record as being opposed to this rule amendment.

Rick Roberts asked to be included, for the record, his opposition to the proposed rule.

Director Castle said that the connection and link to DEP with regard to implementing the proposed EQB rules will definitely be taken into consideration.

Before adjournment of the meeting Bill Raney said he would like to go on record to thank Carrie Chambers for putting together the rules package and e-mailing them to Counsel in a timely fashion. Chairman Castle adjourned the meeting at 4:00 p.m.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 38CSR3-"Rules for Quarrying and Reclamation"

Type of Rule: X Legislative ____ Interpretive ____ Procedural

Agency: Division Environmental Protection, Office of Mining & Reclamation

Address: Attn: Rocky Parsons

1. Effect of Proposed rule:

	ANNUAL		FISCAL YEAR		
	INCREASE	DECREASE	CURRENT	NEXT	THEREAFTER
ESTIMATED TOTAL COST	-0-	-0-	-0-	-0-	-0-
PERSONAL SERVICES					
CURRENT EXPENSE					
REPAIRS & ALTERATIONS					
EQUIPMENT					
OTHER					

2. Explanation of Above Estimates:
Reduced inspection frequency in the proposed rule will conserve agency resources. The additional permit requirements and comprehensive monitoring required in the proposed rule should be offset by the increase in fees for permits, transfers, and modifications.

3. Objectives of These Rules:
To meet requiements mandated in HB 4055, the Quarry Reclamation Act; specifically as it relates to permit applications, bonding, monitoring of blasting, drainage, and other methods of operation, vegetation, inspection monitoring and enforcement determination of civil penalties and administrative functions

Rule Title: 38CSR3 - "Rules for Quarrying and Reclamation"

4. Explanation of Overall Economic Impact of Proposed Rule:

   A. Economic Impact on State Government:
   Reduced inspection frequency will conserve agency resources. The additional permit requirements and comprehensive monitoring required in the proposed rule should be offset by the increase in fees for permits, transfers, and modifications. A new abandoned quarry reclamation fund is also created in the proposed rule.

   B. Economic Impact on Political Subdivisions; Specific Industries; Specific Groups of Citizens: The quarry industry will incur additional costs due to new reclamation and revegetation requirements, bonding, permit fees, and new performance standards.

   C. Economic Impact on Citizens/Public at Large.
   The proposed rule should have no adverse economic impact on citizens/public at large.

Date: July 20, 2000

Signature of Agency Head or Authorized Representative:

Jarrie J. Chambers

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OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

TITLE 38
LEGISLATIVE RULES
BUREAU OF ENVIRONMENT
OFFICE OF MINING AND RECLAMATION

SERIES 3
RULES FOR QUARRYING AND RECLAMATION

§38-3-1. General.

1.1. Scope. -- This Legislative rule establishes general and specific rules for quarrying and reclamation operations including requirements for definitions, permit application requirements and contents; bond and bond pooling fund; haulageways and transportation facilities; blasting; drainage system; method of operation; excess spoil disposal; revegetation and standards for evaluating vegetative cover; mapping, approved person, and markers; transfer or sale of permit rights; public hearings, annual Bonding Progress Report Map and permit renewals, permit modification; inspection and enforcement; final release of bond or bond pooling fund, final inspection report; state and federal compliance.

1.2. Authority. -- WV Code §22-1-3 and §22-4-1.

1.3. Filing Date. --

1.4. Effective Date. --

§38-3-2. Definitions.

Unless the context in which used clearly requires a different meaning, as used in this rule or as referred to in WV Code §22-4 as amended:

2.1. Acid-producing materials means mineral compounds which will, when acted upon by water and air, cause acids to form.

2.2. Acid-producing overburden or spoil means material that may cause spoil which upon chemical analysis, shows a pH of 5.5 or less.

2.3. Active operation means an operation where land is being disturbed or mineral is being removed or processed.

2.4. Approved person means any person approved by the director in accordance with subsection 11.6. of this rule.

2.5. Backfilling means to place spoil material back into an excavation.

2.6. Buffer Zone means an undisturbed border along or around a public road, stream, lake, public park, or public or private property.

2.7. Cut means an excavation made by excavating equipment to remove overburden or mineral.

2.8. Cut-fill means overburden removed from an elevated portion of a road or bench and deposited in a depressed portion in order to maintain a desired width or grade.

2.9. Deep mining or underground mining means quarrying where, except for the face-up and ancillary areas, mineral extraction occurs primarily underground using deep mining techniques and causing minimal disturbance of the surface.

2.10. Diversion ditch means a machine-made or natural waterway used for collecting water or a ditch designed to change the actual or normal course of water.

2.11. Downslope means that area between the lowest proposed mining related construction or excavation area and the adjacent valley floor.

2.12. Drainage plan or system means the proposed method of diversion, collection, treatment, and discharge of all waters within the affected drainage area, as defined by the approved permit.

2.13. Excess spoil means overburden or spoil not used for reclamation and placed in a location other than the pit.

2.14. Groundwater means the water occurring in the zone of saturation beneath the seasonal high water table, or any perched water zones.

2.15. Haulageway or haulroad means any road constructed, improved, or maintained by the operator which is used to transport mineral, overburden, equipment or spoil and is located within the permit area.

2.16. Highwall means the vertical or near vertical wall consisting of the exposed strata after excavating operations.

2.17. Infiltration means the flow or movement of surface water into the subsurface or ground water system.

2.18. Infrequently used access road means any road that is constructed for and used only to provide infrequent service to facilities used in support of quarrying, reclamation activities, or other limited use activities and is not required for the post-quarrying land use.

2.19. Monument means a permanent marker consisting of metal, concrete, or wood used to identify the boundary or entrance to the permit area.Entry monuments shall be constructed of a two inch (2") pipe, concrete or wood post, with a minimum of four feet (4') exposed, and a two foot (2') X three foot (3') sign affixed to the top of the pipe with company name, address, phone number and permit number permanently affixed. Permit or end of quarry monuments shall be set into the earth with a minimum of three feet (3') exposed, painted red, and shall mark the beginning and ending points of the area under permit. Suitable equivalent substitutes may be approved.

2.20. Natural drainway means any watercourse or channel which carries water to the tributaries and rivers of the watershed. The United States Geological Survey classification of perennial or intermittent streams shall be considered as natural drainways.

2.21. Operation means the area where quarrying is being conducted.

2.22. Outer slope means the disturbed area extending from the outer edge of the quarry bench to the extreme lower limit of the disturbed land.

2.23. Overburden means the earth, rock and other materials lying in the natural state above a mineral deposit being quarried or removed.

2.24. Pit means that part of the quarrying operation from which the mineral is being actively removed or has been removed.

2.25. Pollution means any water discharge in violation of the National Pollution Discharge Elimination System permit or permit standards, or any other applicable water quality standards.

2.26. Processing means the crushing, sizing, screening, or washing of the mineral.

2.27. Regrade or grade means to change the contour of any surface by the use of leveling or grading equipment.

2.28. Seepage water means any water entering the ground from the surface through capillary action, cracks, faults or any other natural modes of entry, and finding its way to the surface again.

2.29. Serious violation means a violation, that after an informal conference on the assessment has been held, is rated at a seriousness level of eight (8) or higher.

2.30. Slope means the angle of repose from the horizontal plane of spoil banks or ridges of overburden material made in the quarrying operation; the angle of a hill or mountain. A gentle slope shall mean zero percent (0%) to ten percent (10%); moderate to steep slope shall mean ten percent (10%) to forty-five (45%); extremely steep slope shall mean forty-five (45%) and over.

2.31. Spoil means material of any nature other than topsoil which overlays the mineral being mined which is removed or displaced by excavating equipment, blasting or any other means; or material of any kind which is separated from the mineral being mined as undesirable to the current product.

2.32. Stabilize means to fix in place by mechanical or vegetative means, including, but not limited to, the planting of trees, grasses, vines, shrubs, or legumes.

2.33. Storm water means any water flowing over, around, or through the permitted area in response to a precipitation event. This includes all surface run off.

2.34. Surface water means that water, from whatever source, which is flowing on the surface of the ground.

2.35. Suspension of permit means an act of the director temporarily nullifying the validity of a permit insofar as the quarrying, processing and removal of minerals are concerned.

2.36. Technical Handbook means "The Technical Handbook of Standards and Specifications for Erosion and Sediment Control, Excess Spoil Disposal, Haulageways" for mining operations in West Virginia.

2.37. Water analyses means any water tests or analyses performed using the analytical procedures set forth in the most current edition of "Standard Methods for the Examination of Water and Wastewater".

§38-3-3. Permit Application Requirements and Contents

3.1. Advertisement.

3.1.a. Advertisement Information. -- Each advertisement shall contain at a minimum a clear and accurate location map of a scale and detail found in the West Virginia County Highway Map. The map size shall be at a minimum four inches (4") x four inches (4"). A north arrow and longitude and latitude lines shall be indicated on the map, and such lines shall cross at or near the center of the proposed permit area;

3.1.b. Certification of Publication. -- The advertisement and publication dates for all permit applications, permit renewal applications, applications for modification of a permit, and transfer assignment and sale of permits, shall be certified and notarized by the publishing newspaper. The certificate of publication shall be made a part of the application.

3.1.c. Readvertisement. -- After an application has been advertised in accordance with WV Code §22-4-6(b) and is determined by the director to have had a limited number of minor changes that do not significantly affect the health, safety or welfare of the public, the method of operation, the quarrying and reclamation plan, or the original advertisement, he or she may require one (1) additional advertisement to be published with a ten (10) day public comment period. Changes to the permit application which do significantly affect the health, safety or welfare of the public, the method of operation, the quarrying and reclamation plan or the original publication shall require a full readvertisement in accordance with WV Code §22-4-6(b).

3.1.d. Renotification. -- A renotification letter shall be sent to all commentors of a quarrying application when a determination has been made by the Director that full readvertisement is required.

3.2. QMA File Number. -- Prior to the publication of an advertisement for a quarrying permit in accordance with WV Code §22-4-6(b), the applicant shall submit a complete quarrying permit application and obtain a quarry mining application (QMA) file number. Each QMA number shall be valid for one year; provided, that the director may extend a QMA number beyond one year, if the applicant has diligently pursued the application. In order for a QMA number to be extended, the applicant must submit to the director a written request, which shall state the reason(s) and which shall demonstrate good cause for the extension.

3.3. Fees. -- The one thousand-dollar ($1,000) permit application fee shall be paid prior to the issuance of the QMA number. The one thousand-dollar ($1,000) fee for the original permit shall be paid prior to the issuance of the permit.

3.4. Fish and Wildlife Resources Information.

3.4.a. Each new permit application and major modification shall include fish and wildlife resource information for the permit area and adjacent area. The scope and level of detail for such information shall be determined by the director in consultation with state and federal agencies with responsibilities for fish and wildlife resources. If the director and the state and federal agencies determine that the operation will not adversely impact the fish and wildlife resources, no further assessment is required.

3.4.b. Endangered Species. - When the proposed quarrying operation will affect known threatened or endangered species of plants or animals or their critical habitats, the application shall describe control measures, management techniques, and monitoring methods to be employed in order to protect or enhance such species and habitats. Endangered or threatened species are as listed by the Secretary of Interior under the Endangered Species Act of 1973 (16 U.S.C. 1521 et seq.).

3.4.c. Notice to Governmental Agencies. -- Upon receipt of an application for a quarrying permit, the director shall notify all federal, state, or local government agencies with authority to issue permits and licenses applicable to the proposed quarrying operation including, as appropriate, the local U. S. Army Corps of Engineers District Engineer, state and federal fish and wildlife agencies, and the State Historic Preservation Officer.

3.4.d. Effect on Historic Places and Archaeological Sites. -- Where the proposed quarrying operation will adversely affect any publicly owned park, any place listed on the national register of historic places or archaeological sites, the director shall transmit to the federal, state or local agencies with jurisdiction over the park or historic place the applicable parts of the permit application, together with a request for the agency's approval or disapproval of the operation. Consideration and coordination of the permit review shall be in accordance with the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.) and the Archaeological Resource Protection Act of 1979 (16 U.S.C. 470 et seq.). A permit for such operation shall have joint approval of all affected agencies. Failure of the agency to respond to the director's request within thirty days shall constitute approval.

3.5. Pre-quarrying Water Assessment.

3.5.a. Each new application for a quarrying permit shall contain a pre-quarrying water assessment. The assessment shall be developed using base line information developed over a continuous six-month sampling period. Sampling and analysis of surface and groundwater monitoring sites shall be established within or near the permit area and on adjacent areas in a manner that will best describe the hydrologic conditions of the permit application area. The pre-quarrying water assessment shall at a minimum include the following information:

3.5.a.1. The location of all sampling sites shown on the proposal or drainage map;

3.5.a.2. Water quality descriptions including information on total suspended solids, total dissolved solids, specific conductance, pH, acidity, alkalinity, sulfates, total iron, total manganese and aluminum; provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; provided further, that a limited number of validation samples may be required; and

3.5.a.3. Water quantity descriptions, variation, usage and/or the elevation of water in test wells.

3.6. Cross-Sections.

3.6.a. Typical cross-sections shall be prepared which illustrate the configuration of the permitted area before, during and after quarrying.

3.7 Consolidation of Permits.

3.7.a. Multiple permits which are consolidated under one all inclusive permit shall be assigned the permit number of the most recently issued permit.

3.7.b. The anniversary date of the most recently issued permit being consolidated shall become the new date for permit renewal and submission of the annual Bonding Progress Report Map.

3.8. Special Land Use.

3.8.a. With the approval of the landowner, the director may authorize the retention of drainage structures, roads, buildings or other structures after final bond release.

3.8.b. With the approval of the landowner, the director may authorize the export of backfill material off the permitted area for beneficial purposes, or may authorize other beneficial uses of the operation, which are reasonable. Time limits shall be established for the completion of these special land uses. Drainage control may be required to minimize pollution.

§38-3-4. Bond and Bond Pooling Fund.

4.1. Operators who have operated for less than five (5) years under West Virginia mining laws shall post a performance bond for each acre previously disturbed and each acre proposed to be disturbed during the next ensuing year. The operator shall provide an estimate of the reclamation liability for the permit area based upon the proposed quarrying and reclamation plan. Documentation shall be provided to ensure that the bond provided is equal to or greater than the reclamation liability. For the purpose of this section, disturbed acres do not include reclaimed areas that meet the release requirements of section 17 of these rules. The minimum bond for each permit is ten thousand dollars ($10,000).

4.2. Operators or persons who have operated for five (5) or more years under West Virginia mining laws without a serious violation shall contribute to the bond pooling fund. For each permit, permittees contributing to the fund shall make an initial payment of fifty dollars ($50) for each acre or fraction thereof currently disturbed. For each acre or fraction thereof estimated to be newly disturbed during the next ensuing year, the payment shall be fifty dollars ($50). Thereafter, the permittee shall make an annual payment of twelve dollars and fifty cents ($12.50) for each disturbed acre or fraction thereof until the permittee has paid into the fund a total of one thousand dollars ($1,000) for each disturbed acre.

§38-3-5. Haulageways and Transportation Facilities.

5.1. General. -- Each permittee shall design, construct, utilize, and maintain roads, railroad loops, spurs, sidings, surface conveyor systems, chutes, aerial tram ways and other transportation facilities to meet the requirements of this rule and to control or minimize erosion and siltation, air and water pollution, and to prevent damage to public or private property.

5.2. Plans. -- Typical sections showing width of road cut, fill slopes, surface material of the road, sediment control, a center line profile with grades, sumps, culvert pipe location and size, and other transportation facilities shall be included in the

permit application. The design of haulageways located outside the mineral extraction area or excess spoil disposal areas shall be certified by a qualified registered professional engineer, licensed land surveyor, or approved person as being in accordance with specifications of this rule.

5.3. Location Markings. -- The location of the proposed haulageway or other transportation facility shall be identified on the site by visible markings on one hundred foot (100') centers at the time the quarrying and reclamation plan is pre-inspected, and prior to commencement of construction. Existing roads are exempt from this requirement.

5.4. Grading. -- The grading of a haulageway shall be such that:

5.4.a. No sustained grade shall exceed ten percent (10%);

5.4.b. The maximum grade shall not exceed fifteen percent (15%) for three hundred foot (300');

5.4.c. There shall not be more than three hundred feet (300') of maximum grade for each one thousand feet (1,000') of road constructed;

5.4.d. The surface shall be sloped toward the ditch line at the minimum rate of one-half inch (1/2") per foot of surface width, or crowned at the minimum rate of one-half inch (1/2") per foot of surface width, as measured from the center line of the haulageway; and

5.4.e. The grade on switchback curves shall be reduced to less than the approach grade and shall not be greater than ten percent (10%).

5.5. Cut Slopes. -- Cut slopes shall not be more than 1:1 in soils or 1/4:1 in rock.

5.6. Ditches. -- A ditch shall be provided on both sides of a through-cut and on the inside shoulder of a cut-fill section, with ditch relief cross-drains being spaced according to grade. Water shall be intercepted before reaching a switchback or large fill and led off. Water on a fill or switchback shall be released below the fill, not over it. Ditchlines shall be designed to pass a one-year, twenty-four hour precipitation event.

5.7. Culverts. -- Ditch relief culverts shall be installed according to the following provisions:

5.7.a.

Road Grade in Percent:	Minimum Spacing between Culverts in Feet:
0 - 5	300 - 800
6 - 10	200 - 300
11 - 15	100 - 200

5.7.b. Culverts shall cross the haulageway at a thirty degree (30°) angle downgrade at a minimum slope of three percent (3%) or at a slope or angle approved by the director;

5.7.c. The inlet end shall be protected by a headwall of suitable material, and the outlet end shall be placed below the toe of the fill with an apron of suitable material provided for the outflow to spill on; and

5.7.d. The culvert shall be covered by compacted fill to depth of one foot (1') or half the culvert diameter, whichever is greater.

5.8. Culvert Openings. -- Culvert openings installed on haulageways should not be less than one hundred square inches (100") in area, but, in any event, all culvert openings shall be adequate to carry storm run off from the peak flow of a one (1)-year twenty-four (24) hour precipitation event and shall receive necessary maintenance to function properly at all times.

5.9. Natural Drainway. -- Minor alterations and relocations of natural drainways as shown on the quarrying and reclamation plan shall be permitted if the natural drainway will not be blocked, and if no damage is done to the natural drainway or to adjoining landowners.

5.10. Stream Crossings. -- Drainage structures, such as bridges, culverts, low-water crossings, or other structures designed, constructed and maintained using current prudent engineering practices, shall be required in order to cross an intermittent or perennial stream channel. They shall be such so as not to affect the flow of the stream. Consideration shall be given to the time of year the stream is crossed and length of time the stream channel is used, but in no event, and under no condition shall the flow of the stream be affected or the sediment load of the stream increased during construction and/or use. These structures shall be capable of passing the peak flow for a ten (10)-year twenty-four (24) hour precipitation event from the contributing watershed.

5.11. Removal of Drainage Structures. -- No bridges, culverts, stream crossing, etc., necessary to provide access to the operation, may be removed until reclamation is completed and approved by the director. The same precautions as to water quality are to be taken during removal of drainage structures as those taken during construction and use.

5.12. Stabilization of Slopes. -- All fill and cut slopes shall be stabilized after the construction of a haulageway.

5.13. Haulageway Surfacing. -- Access roads, haulroads, processing areas, yards, storage areas, plant sites, and parking areas shall be stabilized with proper surface materials to prevent erosion. The material used to surface the haulageway shall be sufficiently durable for the anticipated volume of traffic, and the weight and speed of the vehicles using the road. Haulageways shall not be surfaced with any acid-producing or toxic material, or with any material which will produce a concentration of suspended solids in surface drainage.

5.14. Tolerance. -- All grades referred to in this section shall be subject to a tolerance of two percent (2%) grade. All linear measurements referred to in this section shall be subject to a tolerance of ten percent (10%) of measurement. All angles referred to in this section shall be measured from the horizontal and shall be subject to a tolerance of five percent (5%).

5.15. Mud and Debris on Public Roads. -- The deposition of mud and debris on public roads shall be minimized to the extent possible in order to prevent public nuisance.

5.16. Water Bars. -- Water bars of the ditch and earth berm or log type shall be installed according to the following table of spacing in terms of percent of road grade prior to the abandonment of a haulageway or infrequently used road. Spacing of water bars in Feet:

Percent of Haulageway:	Spacing of Water Bars in Feet:
2	250
5	135
10	80
15	60
20	45
Above 20	25

5.17. Dust Control. -- Reasonable means shall be employed to prevent loss of haulageway surface material in the form of dust.

5.18. Abandonment of Haulageway. -- Upon abandonment of a haulageway, the haulageway shall be seeded and every effort made to prevent erosion by means of culverts, water bars or other devices.

5.19. Infrequently Used Access Roads. -- Infrequently used access roads are exempt from subsection 5.4 of this rule.

5.20. Existing Haulageway or Access Roads. -- Where existing roads are to be used for access or haulage and it can be demonstrated that reconstruction to meet the designs and construction requirements of this section would result in greater environmental harm, subdivisions 5.4.a., 5.4.b., and 5.7.a. of this rule will not apply. Provided, however, that the sediment control requirements must otherwise be met.

5.21. Certification. -- Prior to being utilized, all haulroads located outside the mineral extraction area or excess spoil disposal areas for which design criteria were approved as part of the permit shall be certified. Such certification shall affirm that construction was completed in accordance with the approved criteria, except as otherwise noted in the certification statement. Where the certification statement indicates a change from the design standards or construction requirements approved in the permit, such changes shall be documented in as-built plans. If as-built plans are submitted, the certification shall describe how and to what extent the construction deviates from the proposed design, and shall explain how and certify that the road shall meet rule standards. The certification shall be on forms approved by the director and signed by a qualified registered professional engineer, licensed land surveyor or approved person with experience in design and construction of roads.

§38-3-6. Blasting.

6.1. Requirements. -- Each operator shall comply with all applicable state and federal laws relating to the transportation, storage, and use of explosives. The operator shall be responsible for all blasting operations including the transportation, storage and use of explosives within the permit area in accordance with the blasting plan.

6.2. Blasting Plan. -- Each application for a permit, where blasting is anticipated, shall include a blasting plan. The blasting plan shall explain how the applicant shall comply with the blasting requirements of WV Code §22-4, this rule, and the terms and conditions of the permit. This plan shall include, at a minimum, information setting forth the limitations the operator shall meet with regard to ground vibration and airblast, the basis

for those limitations, and the methods to be applied in controlling the adverse effects of blasting operations.

6.3. Written Notification. -- At least thirty (30) days prior to mining operations, written notification of blasting operations which detonate five (5) pounds or more of explosives at any given time, shall be delivered in person or by certified mail to each residence, and owners of protected structures, adjacent to any part of the proposed operation. A written receipt of delivery or the United States Postal Service certified receipt of notification shall be maintained with the blasting log. The notification shall contain at a minimum:

6.3.a. Name, address, telephone number, and an emergency contact phone number of the operator;

6.3.b. Identification of the specific areas in which blasting shall take place;

6.3.c. A general schedule when explosives are to be detonated; and

6.3.d. Types and patterns of audible warning, and all clear signals to be used before and after blasting.

6.4. Blast Record.

6.4.a. A blasting log book formatted in a manner prescribed by the director shall be kept current daily and made available at the permit site for inspection by the director, or upon written request, by the public.

6.4.b. The blasting log shall, in addition to the information required in WV Code §22-4-13(a)(5), contain the following information:

6.4.b.1. Name of permittee, operator, or other person conducting the blast;

6.4.b.2. Location of blast;

6.4.b.3. Name and certification number of blaster-in-charge;

6.4.b.4. Identification of nearest protected structure not owned or leased by the operator and direction and distance, in feet, to such structure;

6.4.b.5. Type of material blasted;

6.4.b.6. Burden and spacing;

6.4.b.7. Diameter and depth of holes;

6.4.b.8. Types of explosives used;

6.4.b.9. Weight of explosives used per hole;

6.4.b.10. Total weight of explosives used;

6.4.b.11. Maximum weight of explosives detonated within any eight (8) millisecond period;

6.4.b.12. Method of firing and type of circuit;

6.4.b.13. Type and length of stemming;

6.4.b.14. If mats or other protections were used;

6.4.b.15. Type of delay detonator used and delay periods used;

6.4.b.16. If a seismograph is used, Seismograph records and air blast records shall include but not be limited to:

6.4.b.16.A. Seismograph and air blast reading, including location, date, and time of reading and its distance from the blast;

6.4.b.16.B. Name of person and firm taking the readings;

6.4.b.16.C. Name of person and firm analyzing the record, where analysis is necessary; and

6.4.b.16.D. Type of instrument, serial number, sensitivity and calibration signal, and certification of annual calibration;

6.4.b.17. Sketch of delay pattern to include the entire blast pattern and all decks; and

6.4.b.18. Reasons and conditions for unscheduled blasts.

6.5. Blasting Procedures.

6.5.a. All blasting shall be conducted during daytime hours, between sunrise and sunset; provided, that the director may specify more restrictive time periods based on public requests or other consideration, including the proximity to residential areas. No blasting shall be conducted on Sunday. Provided, however, the director may grant approval of a request for Sunday blasting if the operator demonstrates to the satisfaction of the director that the blasting is necessary and there has been an opportunity for a public hearing. Blasting shall not be conducted at times different from those announced in the blasting schedule except in emergency situations where rain, lightning or other atmospheric conditions, or operator or public safety requires unscheduled detonations. Blasting shall be conducted in such a way so as to prevent injury to persons, damage to public or private property outside the permit area, adverse impacts on any underground mine, and change in the course channel, or availability of surface or groundwater outside the permit area.

6.5.b. Safety Precautions.

6.5.b.1. Three (3) minutes prior to blasting, a warning signal audible to a range of one-half (1/2) mile from the blast site shall be given. This preblast warning shall consist of three (3) short warning signals of five (5) seconds duration with five (5) seconds between each signal. One (1) long warning signal of twenty (20) seconds duration shall be the "all clear" signal. Each person in the permit area, and each person who resides or regularly works within one-half (1/2) mile of the permit area, shall be notified of the meaning of these signals. The requirement of this paragraph may be waived by the director if adequate alternative warning and safety precautions can be substituted and are made a condition of the approved blasting plan;

6.5.b.2. All approaches to the blast area shall be protected against unauthorized entry prior to and immediately after blasting;

6.5.b.3. All charged holes shall be guarded and posted against unauthorized entry. No charged holes may be left unattended until fired; and

6.5.b.4. Flyrock, including blasted material, shall not be cast from the blasting site more than half way to the nearest protected structure and in no case beyond the bounds of the permit area.

6.5.c. Based upon the physical conditions at the site and when necessary to prevent injury to persons or damage to property, the director may require the operator to monitor air

blast levels using an instrument with an upper-end, flat-frequency response of at least 200 Hz.

6.5.d. Blasting Signs. -- If blasting is necessary to conduct quarrying operations, the following signs and markers shall be required:

6.5.d.1. Warning signs shall be conspicuously displayed at all approaches to the blasting site, along haulageways and access roads to the mining operation, and at all entrances to the permit area. The sign shall at a minimum be two feet by three feet (2' x 3') reading "WARNING! Blasting Area" and explaining the blasting warning and the all clear signals; and

6.5.d.2. Where blasting operations shall be conducted within five hundred feet (500') of the outside right-of-way of a public road, signs reading "Blasting Area", shall be conspicuously placed along the perimeter of the blasting area.

6.5.e. The director may require a seismograph recording of any or all blasts based on the physical conditions of the site in order to prevent injury to persons or damage to property. At no time can the maximum ground vibration or airblast exceed the limits established in WV Code §22-4-13(a) (1), and 13(a)(2).

6.5.f. Based upon the physical conditions at the site and when necessary to prevent injury to persons or damage to property, the director may reduce the maximum allowable ground vibration as provided in WV Code §22-4-13(a)(1).

6.5.g. The maximum airblast and ground-vibration limits as provided in WV Code §22-4-13(a)(1) and 13(a)(2) shall not apply at the following locations:

6.5.g.1. At structures owned by the permittee and not leased to another person; and

6.5.g.2. At structures owned by the permittee and leased to another person, if a written waiver by the lessee is submitted to the director before blasting.

6.5.h. Regardless of whether the permittee chooses to use the scaled distance formula or to seismically monitor each blast, at no time, at any protected structure, may the peak particle velocity exceed the limits established for ground vibration or may the decibel level exceed that established in WV Code §22-4-13(a).

6.5.i. No blasting within five hundred feet (500') of an underground mine not totally abandoned shall be permitted except with the concurrence of the director, the operator of the underground mine, and Mine Safety and Health Administration (MSHA). The director may prohibit blasting on specific areas where it is deemed necessary for the protection of public or private property, or the general welfare and safety of the public.

6.6. Preblast Survey.

6.6.a. The director shall review each pre-blast survey as to form and completeness only, and shall notify the operator of any deficiencies within fifteen (15) days.

6.6.b. Requirements for a preblast survey shall include the following:

6.6.b.1. Surveys shall be conducted and accepted by the director before the planned initiation of blasting operations;

6.6.b.2. If a structure within the requisite area is added to or renovated subsequent to a preblast survey, a survey of such additions and/or renovation shall be performed upon written request of the resident or owner, and such survey must be performed within thirty (30) days of notification of the request;

6.6.b.3. Copies of the report shall be provided to the person requesting the survey and to the director; and

6.6.b.4. Any person who receives a survey and who disagrees with the results of the survey, may submit a detailed description of the specific areas of disagreement.

6.7. Blasting Prohibited. -- The director or his authorized agent may prohibit blasting in specific areas of the permit where it is determined necessary for the general safety of the area.

6.8. Certified Blasting Personnel. -- Each person responsible for blasting operations shall be familiar with the blasting plan and blasting-related-performance standards for the operation at which they are working.

6.9. Assessment. -- Any assessment as set forth in WV Code §22-4-13 or §22-4-24 shall be assessed by the Division of Environmental Protection (DEP) designated assessment officer.

§38-3-7. Drainage System.

7.1. Drainage Plan. -- There shall be submitted with the application for a quarrying permit a drainage plan which shows the proposed method of drainage control on and away from the area of land to be disturbed. Said plan shall indicate the location of sediment control structures, the location of all water test sites, a description of treatment facilities, and all other data as may be required.

7.2. Natural Drainways. -- Natural drainways in the area of land disturbed by quarrying operations shall be kept free of overburden except where overburden placement has been approved. Such drainways shall be identified on the maps submitted with the application. Overburden placement and haulageways across natural drainways shall be constructed so as not to materially increase the sediment load in the stream.

7.3. Constructed Drainways.

7.3.a. Ditch Above Highwall. -- All surface water which drains into the pit shall be effectively intercepted on the uphill side of the highwall by diversion ditches or other suitable and adequate drainage structures and conveyed by adequate channels or other suitable means of discharge to natural drainways outside the disturbed area. The director may, in the exercise of his or her sound discretion, when not in conflict with WV Code §22-4, as amended, waive this rule.

7.3.b. Ditch on Bench. -- Drainage ditches or other suitable structures shall be constructed on the bench in order to carry off storm, surface or seepage water. The breaking point for ditches on the bench shall fall at or near the midpoint between natural or constructed drainways. In no case shall water be discharged over an unprotected spoil slope or across unprotected disturbed area. Removal of water from the bench shall be accomplished by use of adequate pipe, a rock riprap flume, asphalt or concrete chutes, or by grading a channel to non-erosive rock.

7.3.c. Ditch Below Spoil Slope. -- All surface water draining off the disturbed area shall be intercepted by suitable and adequate diversion ditches or berms which will carry the water to suitable drainage control structures before discharge into a natural drainway. These ditches shall be located within twenty-five feet (25') of the anticipated disturbance. If at any time spoil material interferes with the flow of water in these ditches,

that material shall be cleaned out immediately. The director may, in the exercise of his sound discretion, when not in conflict with WV Code §22-4, as amended, waive this rule.

7.4. Sediment.

7.4.a. Sediment Control. -- Drainage control structures shall be constructed in appropriate locations in order to control sedimentation. All such structures shall have a minimum capacity to store .125 acre-ft./acre of disturbed area in the watershed. This disturbed area shall include all land affected by previous operations that is not presently stabilized, and all land that will be affected within the component drainage area. Design criteria and construction specifications for embankment type sediment dams, excavated ponds, other water retarding structures and drainage control structures will be found in the Technical Handbook.

7.4.b. The director may consider approving a reduced storage factor for sediment control structures where the applicant has demonstrated a reasonable likelihood, and the director finds that effluent limitations will be met.

7.4.c All sediment control structures shall be cleaned to the original designed storage capacity when the sediment accumulation reaches sixty percent (60%) of design capacity. Sediment removed during the maintenance of drainage control structures shall be disposed of in a location approved by the director.

7.5. Drainage

7.5.a. Drainage Certification. -- Prior to disturbance in a component drainage area, the operator shall complete and certify the drainage and sediment control system in accordance with the approved permit. The certification shall be on forms approved by the director and signed by a qualified registered professional engineer, licensed land surveyor or an approved person.

7.5.b. As-Built Plans. -- Any deviations from the approved plan which result from unforeseen site specific circumstances arising during construction, shall be reflected in as-built plans submitted by the operator, and approved by the director immediately following construction. The as-built plans shall include the following:

7.5.b.1. The original design;

7.5.b.2. The extent of the changes; and

7.5.b.3. The reference points. If as-built plans are submitted, the certification shall

7.5.b.3.A. Describe how and to what extent the construction deviates from the proposed design; and

7.5.b.3.B. Explain how and certify that the drainage structure will meet the provisions of this rule.

7.6. Water Quality Control.

7.6.a. All reasonable measures shall be taken to intercept all undisturbed surface water to prevent water from entering the pit area by the use of the following:

7.6.a.1. Diversion ditches;

7.6.a.2. Culverts and drainage ditches; or

7.6.a.3. Other methods.

7.6.b. Pits may be used for temporary or auxiliary water storage and sediment control; provided however, that the pit storage does not contribute to water contamination as demonstrated by surface and ground water monitoring. Water accumulation in an active working pit shall be limited to those areas where it does not come into continual contact with loading or excavating equipment. Pits may also be used as permanent water impoundments if approved in the permit application as a part of the sediment control plan or reclamation plan.

7.6.c. All water discharges from the permit shall be monitored in accordance with the approved National Pollutant Discharge Elimination System (NPDES) permit issued to the operator and a written record of the testing dates and analytical data shall be kept current and made available for inspection. A compilation of the foregoing information shall be submitted to the director in accordance with the approved permit.

7.6.d. Any treatment works necessary to meet effluent limitations shall be approved by the director. Discharge from the permit area shall not in any case violate federal or state water quality standards or effluent limitations.

7.6.e. The monitoring frequency shall be governed by the standards set forth in the National Pollutant Discharge Elimination System program under the federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et. seq., and the rules and regulations promulgated thereunder.

7.6.f. Water tests shall be taken before quarrying operations begin, and the results of these tests shall be shown in the permit application. The location for these preliminary tests shall be:

7.6.f.1. On natural drainways above proposed quarrying operation; and

7.6.f.2. On natural drainways below proposed quarrying operations at or near the affected drainage area boundary.

7.7. Seeding of Drainage System. -- All areas disturbed in the installation of the drainage system shall be mechanically stabilized, or seeded and mulched after construction in accordance with section ten (10) of this rule.

§38-3-8. Method of Operation.

8.1. Operator Responsibility. -- In planning and executing quarrying operations, the operator shall have, at all times, proper regard for all requirements imposed by WV Code §22-4, as amended, all rules adopted pursuant thereto, and all provisions of the approved permit.

8.2. Topsoiling or Other Material Suitable for the Post Mining Land Use. - Topsoil or other suitable material necessary for reclamation and revegetation shall be removed in a separate layer and distributed over the backfilled or disturbed area, or if not utilized immediately, segregated and stockpiled in a separate location as specified in the permit. Topsoil not immediately utilized shall be protected from wind and water erosion.

8.2.a. Any material used for topsoiling must be capable of supporting and maintaining the approved post quarrying land use.

8.3. Treatment of Toxic Material. -- Any acid-forming, toxic-forming, combustible materials, or any other waste materials that are exposed, shall be covered with a minimum of four feet (4') of nontoxic and noncombustible material; or test, treat, and blend material to provide materials suitable to prevent water pollution. If necessary, this material shall be treated to neutralize toxicity in order to prevent water pollution and sustained combustion and/or to minimize adverse effects on plant growth and land uses. Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course so as to cause or pose a threat of water pollution.

8.3.a. The director shall specify thicker amounts of cover using non-toxic material where necessary to protect against the following:

8.3.a.1. Upward migration of salts;

8.3.a.2. Exposure by erosion;

8.3.a.3. To provide an adequate depth for plant growth; or

8.3.a.4. To otherwise meet local conditions.

8.4. Small Depressions. -- The requirement of this section to provide positive drainage does not prohibit construction of small depressions if they are approved by the director to minimize erosion, conserve soil moisture, benefit wildlife or promote revegetation. These depressions shall be compatible with the approved post-quarrying land use.

8.5. Backfilling. -- All available spoil material shall be used to backfill pit areas and provide positive drainage. Excess spoil shall be placed in controlled fills or spoil piles in accordance with Section 9 of this rule.

8.6. Grading Outer Spoil. -- All outer spoil shall be graded so as to blend into the adjoining undisturbed lands.

8.7. Regrading or Stabilizing Rills and Gullies. -- Any rills or gullies deeper than nine inches (9") inches forming in areas that have been regraded and the topsoil replaced but where vegetation has not yet been established shall be deemed unacceptable and any such rills or gullies shall be filled, graded, or otherwise stabilized and revegetated. Rills or gullies of lesser size shall also be stabilized if they will be disruptive to the approved post-quarrying land use or may result in additional erosion and sedimentation.

8.8. Inactive Status. -- Inactive status shall be considered for operations that have temporarily ceased for a specified period providing:

8.8.a. disturbed areas are stabilized;

8.8.b. drainage control is maintained, and

8.8.c. prior written approval is obtained from the director.

8.8.d. The operator shall notify the director prior to reactivating the operations.

8.9. Keeping Operation Current. -- Grading, backfilling and water management practices shall be in accordance with the approved quarrying and reclamation plan. Should the particular site conditions or weather make adherence to these guidelines impractical, the director may reasonably extend the time or distance requirements of the plan.

8.10. Off-Site Protection. -- Spoil material may be placed outside the permit area, if approved by the director after a finding that benefits to the environment, future land use or the health, safety or welfare of the public will result. Drainage control may be required to minimize pollution.

8.11. Water Impoundments. -- Prior to the construction of an impounding area for the storage of water after quarrying, approval must be obtained from the director for such impoundment. This plan shall include, but not be limited to the following:

8.11.a. Location of the impounding area;

8.11.b. Dimensions of the area as to capacity and depth (average, maximum and minimum);

8.11.c. Plot plan of impoundment area;

8.11.d. Source of water entering the impoundment;

8.11.e. Quality of the water entering the impoundment;

8.11.f. Quality of water leaving the impoundment and mechanism of discharge;

8.11.g. Mineral or seams quarried or involved with impoundment;

8.11.h. Chemical characteristics of the soils and underlying strata in the impoundment area as they relate to acid production;

8.11.i. Safety aspects considered such as spillway overflow, emergency spillway, access to area; and

8.11.j. Consent of the landowner for such impoundment with submission on specified forms.

8.12. Backfilling and Regrading. -- All disturbed areas are to be reclaimed in accordance with the approved quarrying and reclamation plan. Land above the highwall shall not be disturbed unless the director finds that the disturbance will benefit the future land use of this site or facilitate compliance with the requirements of this section.

8.13. Stabilization. -- The material used to backfill, reduce, or eliminate a highwall shall be sufficiently compacted or otherwise mechanically stabilized so as to ensure stability of the backfill. Woody materials may be buried in the mineral extraction area only when the burial does not cause or add to water pollution or instability.

§38-3-9. Excess Spoil Disposal, Temporary Spoil Storage Areas.

9.1. Disposal of Excess Spoil in Side of Hill Fills. -- Excess spoil or material to be placed in permanent disposal sites shall be transported to and placed in a controlled manner in disposal areas other than the mine workings or excavation only if all the provisions of this section are met.

9.1.a. Location of Disposal Sites. - Permanent excess spoil disposal areas shall be identified on the proposal map, shall be located within the permit area, and they must be approved by the director as suitable for construction of fills. The disposal area shall be located on the most moderate slopes and naturally stable areas available.

9.1.b. Certification. -- Certification of the fill shall be as follows:

9.1.b.1. The fill shall be designed using recognized professional standards and certified by an approved registered professional engineer; and

9.1.b.2. The fill shall be inspected for stability by an approved registered professional engineer after completion of the first fifty foot (50') lift, to assure the following requirements are met:

9.1.b.2.A. Removal of all organic material and topsoil;

9.1.b.2.B. Placement of under-drainage systems; and

9.1.b.2.C. Proper construction in accordance with the approved permit.

9.1.b.3 The approved registered professional engineer shall also provide a certified report upon completion of the fill that the fill has been constructed as designed in the approved permit.

9.1.b.4. Any deviations from the approved permit which result from unforeseen site specific circumstances arising during construction, shall be reflected in as-built plans submitted by the operator and approved by the director immediately following construction. The as-built plans shall include the following:

9.1.b.4.A. The original design;

9.1.b.4.B. The extent of the changes; and

9.1.b.4.C. The reference points.

9.1.b.4.C.1. If as built plans are submitted, the certification shall:

9.1.b.4.C.1.(a) Describe how and to what extent the construction deviates from the proposed design; and

9.1.b.4.C.1.(b) Certify that the fill will meet all the requirements of this rule.

9.1.c. Stabilization. -- Where the slope in the disposal area exceeds 2.8 horizontal to one (1) vertical (thirty-six (36%) percent), or where necessary to achieve a static safety factor of 1.5, measures such as keyway cuts, rock toe buttresses or other techniques shall be used. All organic material shall be removed from the disposal area and the topsoil must be removed and segregated before the overburden is placed in the disposal area. Suitable organic material may be used as mulch or may be included in the topsoil. The spoil shall be transported and placed in a controlled manner, concurrently compacted as necessary to ensure long-term mass stability and prevent mass movement. The fill shall be drained and graded to allow surface and subsurface drainage to be compatible with the natural surroundings.

9.1.d. Drainage. -- The disposal area shall not contain springs, natural water courses or wet weather seeps unless lateral drains are constructed from the wet areas to the under drains in such a manner that infiltration of the water into the fill shall be prevented. The drains shall be designed and constructed of course

rock. If no filter is designed for the under drain, sufficient capacity shall be provided to allow for partial plugging of the drain. No rock shall be used in under drains if it tends to disintegrate or if it is acid-forming or toxic-forming.

9.1.e. Construction. -- Construction of the fill shall be as follows:

9.1.e.1. All areas upon which the fill is to be placed shall first be progressively cleared of all trees, brush, and shrubs. This material shall be removed from the fill area;

9.1.e.2. Depositing and compacting the fill in layers shall begin at the toe of the fill. The layers shall be constructed approximately parallel with proposed finish grade. All material shall be deposited in uniform horizontal layers and compacted with haulage equipment;

9.1.e.3. The thickness of the layers shall not exceed four (4) feet;

9.1.e.4. The outer slope or face of the fill shall be regraded to be no steeper than two (2) horizontal to one (1) vertical (2:1) Provided, That constructed fill slopes may be steeper if they meet a static safety factor of one point five (1.5) and are certified by a registered professional engineer. Benches shall be constructed on the fill at a maximum of every fifty feet (50') in vertical rise above the toe of the fill. The benches shall be no less than twenty feet (20') in width and slope toward the fill at a three (3) to five (5) percent grade and slope laterally at one (1) percent grade to discharge channels capable of passing the peak runoff for a one-hundred (100) year twenty-four (24) hour precipitation event; and

9.1.e.5. When construction of each lift (maximum of every fifty feet (50') in vertical height) of the fill is completed, topsoil or other suitable material which will support vegetation shall be spread over the completed slope and bench. The slopes and benches shall then be seeded and mulched immediately in accordance with the approved revegetation plans.

9.2. Disposal of Excess Spoil Materials in Valley Fills. -- Excess spoil or material to be placed in permanent overburden disposal sites shall be transported to and placed in a controlled manner; spoil to be disposed of in natural valleys must be placed in accordance with the following requirements:

9.2.a. Location of Excess Spoil Areas. - Permanent excess spoil disposal areas shall be identified on the proposal

map, shall be within the permit area and they must be approved by the director as suitable for construction of fills. The disposal area shall be located on the most moderate slopes and naturally stable areas available.

9.2.b. Certification. -- Certification of the fill shall be as follows:

9.2.b.1. The fill shall be designed using recognized professional standards and certified by an approved registered professional engineer; and

9.2.b.2. The fill shall be inspected for stability by an approved registered professional engineer after completion of the first fifty foot (50') lift to assure the following requirements are met:

9.2.b.2.A. Removal of all organic material and topsoil;

9.2.b.2.B. Placement of under-drainage systems; and

9.2.b.2.C. Proper construction is in accordance with the approved permit.

9.2.b.3. The approved registered professional engineer shall also provide a certified report upon completion of the fill that the fill, has been constructed as designed in the approved permit.

9.2.b.4. Any deviations from the approved permit which result from unforeseen site specific circumstances arising during construction, shall be reflected in as-built plans submitted by the operator and approved by the director immediately following construction. The as-built plans shall include the following:

9.2.b.4.A. The original design;

9.2.b.4.B. The extent of the changes; and

9.2.b.4.C. The reference points.

9.2.b.4.C.1. If as built plans are submitted, the certification shall:

9.2.b.4.C.1. (a) Describe how and to what extent the construction deviates from the proposed design; and

9.2.b.4.C.1. (b) Certify that the fill will meet all the requirements of this rule.

9.2.c. Stabilization. -- Where the slope in the disposal area exceeds 2.8 horizontal to one (1) vertical (thirty-six percent (36%)) or where necessary to achieve a static safety factor of 1.5, measures such as keyway cuts, rock toe buttresses or other techniques shall be used. All organic material shall be removed from the disposal area and the topsoil must be removed and segregated before the overburden is placed in the disposal area. Suitable organic material may be used as mulch or may be included in the topsoil. The spoil shall be transported and placed in a controlled manner, concurrently compacted as necessary to insure long-term mass stability and prevent mass movement. The fill shall be drained and graded to allow surface and subsurface drainage to be compatible with the natural surroundings.

9.2.d. Drainage. -- The disposal area shall not contain springs, natural water courses or wet weather seeps unless lateral drains are constructed from the wet areas to the under drains in such a manner that infiltration of the water into the fill shall be prevented. If springs, natural watercourses or wet weather seeps are encountered, a system of under drains shall be constructed from each spring or seepage area as lateral drains to the rock core. If no filter is designed for the under drain, sufficient capacity shall be provided to allow for partial plugging of the drain. No rock shall be used in under drains if it tends to disintegrate or if it is acid-forming or toxic-forming.

9.2.e. Construction. -- Construction of the fill shall be as follows:

9.2.e.1. All areas upon which the fill is to be placed shall first be progressively cleared of all trees, brush, and shrubs. This material shall be removed from the fill area. No more than three (3.0) acres, excluding roadway for construction of fill, shall be cleared in the valley fill site until the first lift is completed;

9.2.e.2. A rock core shall be progressively constructed as the layers are brought up through the valley fill. The rock core shall be a minimum of sixteen feet (16') in width and composed of rock with a minimum dimension of twelve inches (12"). The rock core shall consist of no more than ten percent (10%) fines as determined by visual inspection (fines being a material with a dimension of less than twelve inches) (12");

9.2.e.3. Depositing and compacting the fill in

layers shall begin at the toe of the fill. The layers shall be constructed approximately parallel with proposed finish grade. All material shall be deposited in uniform horizontal layers and compacted with haulage equipment;

9.2.e.4. The thickness of the layers shall not exceed four feet (4');

9.2.e.5. During and after construction, the top of the fill shall be graded to drain back to the head of the fill on a slope no greater than three percent (3%). A drainage pocket shall be maintained at the head of the fill at all times to intercept surface runoff. Maximum size of the drainage pocket shall be ten thousand (10,000) cubic feet;

9.2.e.6. The outer slope or face of the fill shall be regraded to be no steeper than two (2) horizontal to one (1) vertical (2:1) Provided, That constructed fill slopes may be steeper if they meet a static safety factor of one point five (1.5) and are certified by a registered professional engineer. Benches shall be constructed on the fill at a maximum of every fifty feet (50') in vertical rise above the toe of the fill. The benches shall be no less than twenty feet (20') in width and slope toward the fill at a three (3) to five (5) percent grade and slope laterally at one (1) percent grade to discharge channels capable of passing the peak runoff for a one-hundred (100) year twenty-four (24) hour precipitation event.

9.2.e.7. When construction of each lift (maximum of every fifty feet (50') in vertical height) of the valley fill is completed, topsoil or other suitable material which will support vegetation shall be spread over the completed slope and bench excluding the rock core. The completed slope and bench shall then be seeded and mulched immediately in accordance with the approved revegetation plans.

9.3. Disposal of Excess Spoil Material in Durable Rock Fills. -- The director may approve the design, construction, and use of a single lift fill consisting of at least eighty percent (80%) durable rock if it can be determined, based on information provided by the operator, that the following conditions exist:

9.3.a. Permanent excess disposal areas shall be identified on the proposal map, be within the permit area, and they must be approved by the director as suitable for construction of fills. The disposal area shall be located on the most moderate slopes and naturally stable areas available.

9.3.b. Geotechnical Information. -- Examination of core

borings and the geologic column show that the overburden consists of durable sandstone, limestone, or other durable material in sufficient thickness and amounts to generate spoil material that is eighty percent (80%) or greater durable rock. Where the fill will contain non-cemented clay shale, clay spoil, or other nondurable material, such material must be mixed with durable rock in a controlled manner such than no more than twenty percent (20%) of the fill volume is not durable rock. Tests shall be performed by a Registered Professional Engineer, and approved by the director to demonstrate that no more than twenty percent (20%) of the fill is not durable rock.

9.3.b.1. The durable rock shall not consist of acid-producing or toxic-forming material, will not slake in water, or will not degrade to soil material. For purposes of this paragraph only, soil material means material of which at least fifty percent (50%) is finer than 0.074 mm, which exhibits plasticity, and which meets the criteria for group symbol ML, CL, OL, MH, CH, or OH, as determined by the United Soil Classification System (ASTM D-2487).

9.3.b.2. The toe of the fill shall rest on natural slopes no steeper than twenty percent (20%).

9.3.c. The fill shall be designed based on the results of sufficient geotechnical investigations of the construction site. The investigation shall include such factors as geologic conditions, soil characteristics, depth to bedrock location of springs, seeps and groundwater flow, potential effects of subsidence and a description of materials to be placed in rock cores and drains.

9.3.d. The design and construction of all durable rock fills must be certified by a registered professional engineer experienced in design and construction of earth and rock embankments.

9.3.e. The foundation of the fill and the fill shall be designed to assure a long-term static safety factor of 1.5 or greater, and meet an earthquake safety factor of 1.1.

9.3.f. All areas upon which the fill is to be placed shall first be progressively cleared of all trees, brush, and shrubs which are above ground level; provided; that in critical foundation areas, including, but not limited to, the toe of the fill, seepage or underdrain areas, and downstream portions of the fill that provide resisting force against massive slope failure, all organic material both above and below that ground surface must be removed. This material shall be disposed of outside the fill

area.

9.3.g. The underdrain system may be constructed simultaneously with excess spoil placement by natural segregation of dumped materials; provided, that the resulting underdrain system shall be capable of carrying anticipated seepage of water due to rainfall away from the excess spoil fill, and from seeps and other springs in the foundation of the disposal area, and the other requirements for drainage control shall be met. If the underdrain system is not constructed by natural segregation of dumped material, it shall be designed and constructed in accordance with subdivision 9.1.d. of this rule.

9.3.h. Surface water runoff from areas above and adjacent to the fill shall be diverted into properly designed and constructed stabilized diversion channels which have been designed using the best current technology to safely pass the peak runoff from a one hundred (100) year, twenty four (24) hour precipitation event. The channel shall be designed and constructed to ensure stability of the fill, control erosion, and minimize water infiltration into the fill.

9.3.i. The grade of the top surface of the completed fill shall not exceed five percent (5%) and shall slope toward the drainage channel.

9.3.j. The outer slope or face of the fill shall be regraded to be no steeper than two (2) horizontal to one (1) vertical (2:1) Provided, That constructed fill slopes may be steeper if they meet a static safety factor of one point five (1.5) and are certified by a registered professional engineer. Benches shall be constructed on the fill at a maximum of every fifty feet (50') in vertical rise above the toe of the fill. The benches shall be no less than twenty feet (20') in width and slope toward the fill at a three (3) to five (5) percent grade and slope laterally at one (1) percent grade to discharge channels capable of passing the peak runoff for a one-hundred (100) year twenty-four (24) hour precipitation event.

9.3.k. No permanent impoundments may be constructed on the completed fill except small depressions may be allowed if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation; and if they are not incompatible with the stability of the fill.

9.3.l. Notwithstanding any other provisions of this rule or terms and conditions of a permit to the contrary, additional storage capacity or sediment control measures may be required through permit revision if sediment removal performance of the

structure(s) during operation and construction of the fill is found to be deficient to the point that significant non-compliance with applicable effluent limits or water quality standards results.

9.3.m. The following materials are hereby prohibited from being placed, deposited, or disposed of into a durable rock fill or durable rock fill area:

9.3.m.1. Surface soils, provided that such soils used to establish vegetation on the surface of the fill are not prohibited; provided, however, such soils may be placed in the fill if accounted for in design and construction as nondurable material, and such soils are not deposited in critical zones of the fill;

9.3.m.2. Mud, silt, or sediment cleaned or removed from mining pits, roadways, sediment control structures and/or other areas of the operation;

9.3.m.3. Vegetative or organic materials cleared or grubbed from the permit or other areas; and

9.3.m.4. Coal refuse.

9.3.n. Inspection and Certification of Durable Rock Fills. -- Certification of all durable rock fills shall be required as follows:

9.3.n.1. The fill and appurtenant structures shall be designed in accordance with professional design standards, which meet the requirements of this subsection, and certified by a registered professional engineer experienced in the design of earth and rock fill embankments;

9.3.n.2. During construction, the fill shall be inspected quarterly for stability by a registered professional engineer experienced in the construction of earth or rock fills or other qualified professional specialist working under the direction of a professional engineer experienced in the construction of earth or rock fills. Regular inspections are also required during placement and compaction of fill materials and during critical construction periods such as foundation preparation, underdrain placement, installation of surface drainage systems, and construction of rock toe buttresses. Within two (2) weeks following completion of the inspections, a report certified by the registered professional engineer shall be submitted to the director. The certified report shall contain a statement that the fill is being constructed and maintained as designed in accordance with the approved plan and this rule. The report shall also note any instances of apparent instability, structural weaknesses, and

other hazards. The report on the drainage system and protective filters shall include color photographs taken during and after construction, but before the underdrains are covered with excess spoil. Color photographs shall be of sufficient size and number to provide a relative scale and to clearly identify the site. If the underdrains are constructed in phases, each phase must be certified separately. If excess durable rock spoil is placed such that the underdrain system is constructed simultaneously with excess spoil placement by the natural segregation of dumped materials, color photographs of the underdrains must be taken as they are formed. All color photographs shall be of adequate size and number to provide a relative scale and to clearly identify the site. A copy of the certified report shall be maintained at the mine site;

9.3.n.3. After total completion of the fill, a certification form shall be completed and submitted to the director by the registered professional engineer overseeing construction of the fill; and

9.3.n.4. In addition to the requirements of subparagraph (2) of this paragraph, certification forms for durable rock fills shall be accompanied by the following:

9.3.n.4.A. A statement attesting that the fill contains no more than twenty percent (20%) non-durable material;

9.3.n.4.B. A statement attesting that foundation preparation is proceeding in accordance with the design plans;

9.3.n.4.C. A statement that prohibited materials are not being placed, deposited, or disposed of into the fill area; and

9.3.n.4.D. A statement that sediment control measures are constructed and being maintained in accordance with the approved design plans, and the terms and conditions of the permit.

9.3.n.4.E. Any deviations from the approved drainage plan which result from unforeseen site specific circumstances arising during construction, shall be reflected in as-built plans submitted by the operator and approved by the director immediately following construction. The as-built plans shall include the following:

9.3.n.4.E.1. The original design;

9.3.n.4.E.2. The extent of the changes;

and

9.3.n.4.E.3. The reference points.

9.3.n.4.F. If as built plans are submitted, the certification shall:

9.3.n.4.F.1. Describe how and to what extent the construction deviates from the proposed design; and

9.3.n.4.F.2. Certify that the fill will meet all the requirements of this rule.

9.4. Disposal of Excess Spoil Material in Spoil Piles. -- Excess spoil being placed in permanent overburden disposal sites on natural ground with an original slope of less than twenty (20) degrees shall be transported to and placed in a controlled manner; spoil piles must be placed in accordance with the following requirements:

9.4.a. Location of Disposal Sites. - Permanent excess disposal areas shall be identified on the proposal map, be within the permit area, and they must be approved by the director as suitable for construction of spoil piles. The disposal area shall be located on the most moderate slopes and naturally stable areas available.

9.4.b. Drainage. -- The disposal area shall not contain springs, natural water courses or wet weather seeps unless lateral drains are constructed from the wet areas to under drains in such a manner that infiltration of the water into the spoil pile shall be prevented. The drains shall be designed and constructed of coarse rock. If no filter is designed for an under drain, sufficient capacity shall be provided to allow for partial plugging of the drain. No rock shall be used in under drains if it tends to disintegrate or if it is acid-forming or toxic-forming.

9.4.c. Construction. -- Construction of the spoil pile shall be as follows:

9.4.c.1. All areas upon which the spoil pile is to be placed shall first be progressively cleared of all trees, brush, and shrubs. This material shall be removed from the area of the spoil pile;

9.4.c.2. All material shall be deposited in uniform horizontal layers and compacted with haulage equipment;

9.4.c.3. Unless waived by the director based upon

a stability analysis of the spoil pile, the thickness of the layers shall not exceed four (4) feet; and

9.4.c.4. The outer slope or face of the spoil pile shall be regraded to be no steeper than two (2) horizontal to one (1) vertical (2:1) Provided; that constructed slopes may be steeper if they meet a static safety factor of one point five (1.5) and are certified by a registered professional engineer. Benches shall be constructed on the spoil pile at a maximum of every fifty feet (50') in vertical rise above the toe of the spoil pile. The benches shall be no less than twenty feet (20') in width, and slope toward the pile at a three (3) to five (5) percent grade, and slope laterally at one (1) percent grade to discharge channels design in accordance with section 5 of this rule; and

9.4.c.5. When construction of a spoil pile is completed, topsoil or other suitable material which will support vegetation shall be spread over the completed slopes and benches. The slopes and benches shall then be seeded and mulched immediately in accordance with the approved revegetation plans.

9.5. Temporary Spoil Storage Areas - Temporary spoil storage areas must be approved by the director as suitable for construction of a fill. The storage area shall be located on the most moderate slopes and naturally stable areas available. Temporary spoil storage areas constructed on slopes steeper than twenty (20) degrees shall be designed using those same requirements as permanent excess spoil disposal sites.

9.6. Variance. -- Where it can be demonstrated that other design criteria are justified, certain requirements of this section may be waived. The basis for justification is, but not limited to, land use potential, access to mineral reserves, unavailability of durable rock, and site stability.

§38-3-10. Revegetation and Standards for Evaluating Vegetative Cover.

10.1. General Requirements. -- Each operator shall establish on all regraded areas and all other disturbed areas a diverse, effective and permanent vegetative cover of the same seasonal variety native to the area of disturbed land, or introduced species that are compatible with the approved postmining land use.

10.2. Objective in Revegetation. -- The objective in revegetation is to quickly establish a vegetative cover on all disturbed areas to minimize erosion, provide economic benefits, and restore aesthetic appeal. Plants that will give a quick permanent

cover and enrich the soil shall be given priority. A temporary or permanent cover should be established by the end of the first growing season, and a permanent cover by the end of the second growing season. All plants shall be considered a tool in achieving stabilization and an appropriate land use objective.

10.3. Seeding and Planting.

10.3.a. Seasonal Feasibility. -- Appropriate vegetation shall be planted, seeded, aerial-seeded, or hydro-seeded in accordance with accepted agricultural and reforestation practices when the season is favorable for seed germination and plant survival, except as otherwise specified in this rule.

10.3.b. Minesoil Characteristics. -- Quarrying of minerals and removal of overburden results in minesoil which varies greatly in fertility, acidity and stoniness. These three (3) characteristics, together with steepness of slope, shall be used in determining characterization for the purpose of establishing vegetation. Premining overburden sampling and analysis or previous experience and correlation data, shall be submitted with the quarrying and reclamation plan for all acid-producing overburden or minerals. The plan shall identify acid strata and provide planned handling and final placement for acid strata. Overburden analysis shall be in accordance with standard procedures outlined in Environmental Protection Agency Manual No. 600/2-78-054 (Field & Laboratory Methods Applicable to Overburdens and Minesoils), or other approved methods by the Division of Environmental Protection.

10.3.c. Function of Temporary Cover Crops. -- On areas where excessive erosion is likely to occur, rapid establishment of vegetative cover shall be required. Seeding of annuals and biennials on such areas shall be considered as a means for achieving temporary vegetative cover only and not acceptable in the achievement of permanent cover. See Table Five.

10.3.d. Development of Planting Plan. -- Planting plans shall be a part of the quarrying and reclamation plan. The plan, when appropriate, shall include the following information:

10.3.d.1. Tests for minesoil acidity, expressed as pH, shall be taken at points distributed uniformly over the disturbed area. Minesoil tests may be made with accepted field indicators or other approved techniques. Minesoils with chemical characteristics that could restrict vegetation establishment and growth shall be analyzed by an approved soils laboratory;

10.3.d.2. Treatment to neutralize acidity;

10.3.d.3. Mechanical seed bed preparation;

10.3.d.4. Rate and analysis of fertilization;

10.3.d.5. Rates and types of mulch;

10.3.d.6. Perennial vegetation including herbaceous and woody plants where appropriate, rate and species;

10.3.d.7. Areas to be planted or seeded to trees and shrub;

10.3.d.8. Land use objective; and

10.3.d.9. Maintenance schedule if appropriate.

10.3.e. Concurrent Revegetation. -- Seeding shall be concurrent with the operation as quarrying and reclamation progresses. The final spring planting date shall be May fifteenth. The final fall planting date shall be September fifteenth. The director may establish alternate final planting dates for the spring and fall planting seasons based upon weather or other conditions.

10.3.f. Plant Material Selection and Treatment.

10.3.f.1. Specifications. -- All planting plans for woody vegetation shall include provisions for herbaceous cover using a suitable mixture from Table One (1). The following specifications should govern the selection and establishment of seeds and plants used in the revegetation of surface minesoil and based upon the following capability class:

10.3.f.1.A. On favorable minesoil material, prepared for perennial cover crop use, non-stoney and with pH 5.5 or higher, one of the following mixtures should be used:

10.3.f.1.A.1. Seed mixtures one (1), two (2), three (3), four (4), or five (5) from Table one, of this rule should be applied where annual maintenance treatment is assured. Mixture four (4) should be applied where the graded portion of minesoil is to be used as a firebreak or occasionally as a haulageway;

10.3.f.1.A.2. Establishment of grass, legume or perennial grass cover crop shall require the following treatment:

10.3.f.1.A.2.(a) Inoculation of

legume seed with proper strain;

10.3.f.1.A.2.(b) Triple inoculation rate if hydro-seeded;

10.3.f.1.A.2.(c) Protection of seeded minesoil area from grazing livestock;

10.3.f.1.A.2.(d) Application of lime to pH 6.0 for mixture four (4), to pH 6.5 to 7.0 for all other mixtures;

10.3.f.1.A.2.(e) Application of fertilizer shall be based on a minesoil test for lime, phosphorus, and potash from a soils lab or shall be a minimum of two-hundred (200) lbs./acre, ammonium nitrate and two-hundred (200) lbs./acre triple super phosphate or equivalent;

10.3.f.1.A.2.(f) Preparation of seed bed by harrowing, discing or other approved methods; and

10.3.f.1.A.2.(g) Completion of fall seeding for legumes should be completed by September 1.

10.3.f.1.A.3. Maintenance of cover crop shall be carried out by the operator until the cover crop is adjudged by the director to be satisfactorily established and may require the following treatment:

10.3.f.1.A.3.(a) Maintain pH 6.5-7.0 for Mixture one (1);

10.3.f.1.A.3.(b) Maintain pH 6.0-6.5 for Mixture two (2), three (3), four (4), and six (6);

10.3.f.1.A.3.(c) Maintain pH 5.5-6.0 for Mixture four (4); and

10.3.f.1.A.3.(d) Top dress every two (2) years with four-hundred (400) lbs. per acre 0-20-20 for Mixture five (5).

10.3.f.1.B. On favorable minesoil material prepared for woodland and wildlife use, any one mixture from Table two (2) of this rule, along with proportions and treatment prescribed for it, should be selected for use in the direct seeding of herbaceous species and planting of trees and seedlings.

10.3.f.1.B.1. Establishment of plant

growth for woodland cover on favorable minesoil material prepared for woodland and wildlife use should require the following:

10.3.f.1.B.1.(a) Spring planting of seedlings not later than May 1st and preferably before April 15th; and

10.3.f.1.B.1.(b) Spacing of shrubs and all trees in a pattern eight feet (8') by eight feet (8') apart of six hundred-eighty (680) trees per acre.

10.3.f.1.B.2. Establishment of crown vetch-rye grass or clover-tall Fescue mixtures for wildlife cover may be done in accordance with paragraph 10.3.f.1.A.2 of this rule.

10.3.f.1.C. On moderately favorable minesoil material, prepared for woodland and wildlife use, with pH 5.5 and above, graded but stoney, on moderate to steep slopes, non-stoney and stoney, one of the mixtures with specified proportion and treatment from Table three (3), of this rule should be used:

10.3.f.1.C.1. Over seeding on moderate to steep slopes on tree planting sites shall be carried out on minesoil in order to prevent siltation, established ground cover and minimize erosion. Seed one of the mixtures from Table one (1); and

10.3.f.1.C.2. Establishment of plant growth shall require inoculation of legume seed with proper strain, and shall be protected from grazing by livestock. Triple inoculation rate if hydroseeding.

10.3.f.1.D. On favorable minesoil material prepared for woodland and wildlife use, which includes all extremely steep and/or stony minesoil, one of the mixtures with specified proportions and treatment from Table three (3) of this rule shall be used:

10.3.f.1.D.1. Establishment of plant growth should require:

10.3.f.1.D.1.(a) Broadcasting Mixture one (1) and three (3) before May 1st and frost seeding mixture two (2) by early March; and

10.3.f.1.D.1.(b) Black locust seed must be seventy percent (70%) or more viable. All legumes must be inoculated and must be protected from grazing by livestock. Triple inoculation rate if hydroseeding. Mixture No. one (1) of Table

three (3), should be used for extremely stoney areas when tested acidity indicated a pH of 4.0 or better.

10.3.f.1.E. Other species of trees, shrubs, grasses, legumes or vines may be approved by the director.

10.3.g. Mulch Specifications. -- Mulch shall be used on all disturbed areas. Annual grains such as oats, rye, wheat, etc. may be used instead of mulch when it is shown to the satisfaction of the director that the substituted grains will provide adequate stability, and that they will be replaced by species approved for the post mining land use. Approved materials and minimum rates to be applied are as follows:

Material:	Rate/Acre:
Straw or hay	1 - 2 tons material may be anchored with asphalt emulsion or other techniques approved by the director.
Wood fiber or wood cellulose products	1,000 lbs.
Shredded Bark	50 cubic yards

10.3.h. Standards for Evaluating Vegetative Cover.

10.3.h.1 Final Planting Report. -- A planting report shall be prepared by the operator and filed with the director on the prescribed form thirty (30) days after the planting of a permit area is completed. All planting reports shall be certified by the operator or by the party with which the operator contracted for planting.

10.3.h.2. Time for Inspection. -- The operator shall review all areas under permit prior to the recognized spring and fall planting seasons. The operator shall cause those areas deficient of vegetative cover to be retreated to establish a satisfactory stand of vegetation. For purposes of bond release, the vegetation must survive two (2) growing seasons or twenty-four (24) months and must meet the following standards:

10.3.h.2.A. Standards for Perennials. -- Standards for legumes and perennial grasses shall require at least an eighty percent (80%) ground cover. Substandard areas shall not exceed one-fourth (1/4) acre (100' X 100') in size nor total more

than twenty percent (20%) of the area seeded.

10.3.h.2.B. Standards for Woody Plants with Perennials. -- Standards for woody plants with legumes and perennial grasses overseeded shall require a sixty percent (60%) establishment of ground cover of legumes and perennial grasses, and four hundred (400) trees (including volunteer tree species) and/or planted shrubs per acre, comprising a satisfactory vegetative ground cover as determined by the director. Substandard areas shall not exceed one-fourth (1/4) acre (100' X 100') in size not total more than twenty percent (20%) of the area seeded or planted.

10.3.h.2.C. For areas developed for industrial, commercial, residential or public use less than two (2) years after reclamation is completed, the requirements of subparagraph 10.3.h.2.A. and B. of this section do not apply. The ground cover of living plants shall not be less than required to control erosion. When the permittee has demonstrated that the proposed post quarrying land use will be accomplished, the director may release the bond or the operator's contributions to the bond pooling fund.

10.4. The permittee shall protect all vegetated areas from excessive grazing.

§38-3-11. Mapping, Approved Persons, and Markers.

11.1 Scale for Maps. -- The scale required for all maps and plans prepared for submission with an application for a quarrying permit shall be as follows:

11.1.a. Scale on a U.S. geological survey topographic seven point five (7.5) minute quadrangle shall be enlarged to five hundred feet (500') or less to the inch; and

11.1.b. Scale on aerial photographs shall be six hundred sixty feet (660') or less to the inch.

11.1.c. Written approval from the director shall be required prior to the submission of maps drawn to any scale other than those set forth by this rule.

11.2. Scale for Progress, Modification, Annual Bonding Progress Report and Final Maps. -- The scale required for progress, modification, Annual Progress Report and final maps shall be the same scale as the proposal and drainage map.

11.3. Location Map - All maps shall contain a clear and

accurate location map of a scale and detail similar to that found on the West Virginia county highway map.

11.4. Map Size. -- All maps and plans shall be submitted on standard print paper, twenty-four inches (24") by thirty-six inches (36") or less. If supplementary maps or plans are attached, match lines shall be used.

11.5. Color Code. -- A color code shall be used in preparing all maps to indicate critical features of the permit area as follows; provided, that drafted or computer generated graphic symbols or shading may be used in place of a color code, if a separate, uniquely identifiable, and clearly discernible symbol or shading is provided in place of each color as specified below, and if the symbols or shading are clearly defined on map legends and used consistently throughout the permit application, and in any subsequent permit modifications, progress maps, or other submittals relating to the permit:

11.5.a. Red shall indicate the mineral removal area;

11.5.b. Yellow shall indicate disturbed land not included in the mineral removal area;

11.5.c. Blue shall indicate water and drainage;

11.5.d. Brown shall indicate special uses;

11.5.e. Green shall indicate reclaimed areas; and

11.5.f. Purple shall be used to outline adjacent mining permits.

11.6. Approved Person. -- Any person preparing an annual Bonding Progress Report Map or certifying the construction of drainage control structures, haulageways, or preparing a reclamation and quarrying plan shall first submit to the director a written resume of their past experience and training. A written test may also be administrated. On the basis of such resume and/or written test, he or she shall be adjudged qualified or not as the case may be, and so notified by the director in writing. Approved person status may be revoked at the discretion of the director.

11.7. Permit or End of Quarry Marker. -- A two-inch (2") pipe shall be driven into the earth with a minimum of three feet (3') exposed to permanently mark the beginning and ending points of the area under permit. It shall be identified by painting the exposed portion of the pipe red. Any suitable substitute may be approved. The assigned permit number shall be permanently affixed to the

permit or end of quarry marker.

§38-3-12. Transfer or Sale of Permit Rights.

12.1. The director may grant written approval for the transfer or sale of a permit under the following terms and conditions:

12.1.a. Transfer of permits. -- When the interest of a permittee of any quarrying operation is sold, leased, assigned or otherwise disposed of, the transferor shall file an application for transfer within thirty (30) days. The application for transfer or sale shall be set forth on forms prescribed by the director;

12.1.b. Approval of the application for transfer or sale of a permit may be granted upon a written finding by the director that the applicant shall conduct mining operations in accordance with the purposes and intent of the Act, this rule, and the terms and conditions of the permit. Such findings shall be based on information set forth in the application for transfer or sale, and any other information made available to the director. Such approval may be granted in advance of the close of the public comment period provided; that where information is made available to the director precludes approval, such approval shall be immediately withdrawn;

12.1.c. Each application for a transfer or sale of a permit shall contain a sworn statement as follows: "The information contained in this application is true and correct to the best of my knowledge and belief." Such statement shall be signed by a principal officer of the applicant and shall be notarized; and

12.1.d. Any person who, through whatever means, assumes ownership or control directly or indirectly of a quarrying operation must be eligible to receive a permit and shall become responsible for the correction of all outstanding unabated violations, unpaid fees or penalties.

§38-3-13. Public Hearings.

13.1. Public Hearing.

13.1.a. Any request for a public hearing shall be in writing and received by the director before the close of the public comment period.

13.1.b. Those requesting the public hearing shall be notified, and the date, time, and location of the public hearing

shall also be advertised by the director in a newspaper of general circulation in the county or counties in which any portion of the proposed permit area is located least one (1) week prior to the scheduled hearing date.

13.1.c. The director's authorized agent shall preside over the public hearing.

13.1.d. In the event all parties requesting the public hearing stipulate agreement prior to the hearing and withdraw their request, a hearing need not be held.

§38-3-14. Annual Bonding Progress Report Map and Permit renewals

14.1. Annual Bonding Progress Report Map. - Thirty days prior to the anniversary date of the permit issuance, the permittee shall provide the director a Bonding Progress Report Map showing, with a reasonable degree of accuracy, the acreage of land currently disturbed, the acreage of land which is reclaimed and the estimated acres of land to be newly disturbed during the next ensuing year. The map shall be prepared by a registered professional engineer, licensed land surveyor, or an approved person and the accuracy verified by the director. Aerial photographs may be substituted if all of the information required by this paragraph can be accurately shown. The map or aerial photograph shall be used by the director to compute bond or bond pooling fund adjustments. For the purpose of this section "reclaimed" quarry land means those areas which meet bond release requirements. When no additional land has been disturbed by operations during the preceding year and the prior annual Bonding Progress Report Map or aerial photograph is still up to date, in lieu of the map, the operator may provide a signed statement regarding the status of the operation to the director.

14.2. Permit Renewal - Each quarrying and reclamation plan shall be reviewed at the time of permit renewal to ensure compliance with the requirements of WV Code §22-4, this rule, and permit conditions. Consideration should be given to those areas which were permitted, but not disturbed prior to the effective date of this rule in allowing reasonable time to bring these areas into compliance. Areas that were permitted, disturbed, and properly stabilized prior to the effective date of this rule will not be required to be reaffected.

14.3. After the effective date of WV Code §22-4, all permits shall be renewed on the anniversary date of the permit issuance for a period of five (5) years.

14.4. Each request for a permit renewal shall be submitted on forms prescribed by the director and shall contain a sworn

statement as follows: "The information contained in this application is true and correct to the best of my knowledge and belief.", and shall be signed by a principal officer of the applicant and shall be notarized.

14.5. Each renewal application shall include four (4) copies of a progress map prepared consistent with the provisions of WV Code §22-4-18 (g). The map shall reflect all previous permit modifications, shall indicate the acres permitted, disturbed, and reclaimed and shall become the new map of record.

§38-21-15. Permit Modifications.

15.1. Each request for a permit modification shall be submitted on forms prescribed by the director which shall be signed by a principal officer of the applicant.

15.2. The director may require reasonable modifications to mining permits where such modifications are necessary to assure compliance with the Act and this rule; provided, that the director shall notify the permittee that such modifications are necessary and shall provide a reasonable time for compliance.

§38-3-16. Inspection and Enforcement.

16.1. Inspection Frequencies. -- The director shall inspect each active operation at least once every calendar quarter. Operations with approved inactive status shall be inspected at least once every six (6) months. More inspections may be conducted as necessary to ensure compliance.

16.2. Compliance Conference. -- A permittee may request an on-site compliance conference to review the status of any condition or practice at any quarrying or reclamation operation. Any compliance conference shall not constitute an inspection within the meaning of W. Va. Code §22-4-24 and this section. The director may accept or refuse any request to conduct a compliance conference. If accepted, authorized representative of the director shall conduct the compliance conference, and shall review conditions and/or practices at the operation in order to advise whether any conditions and/or practices has a potential to become a violation of the Act, this rule or any applicable permit condition. Neither the holding of a compliance conference or any opinion given by the authorized representative of the director at a conference shall affect:

16.2.a. Any rights or obligations of the director or the permittee with respect to any enforcement action, whether prior or

subsequent to the compliance conference; or

16.2.b. The validity of any enforcement action taken with respect to any condition or practice reviewed at the compliance conference.

16.3. Notice of Violations. -- When, on the basis of an inspection carried out pursuant to subsection 16.1 of this section, the director determines that a quarrying or reclamation operation is in violation of any of the requirements of the Act, this rule, or the terms and conditions of the permit, a notice of violation may be issued. Each day of noncompliance constitutes a separate violation.

16.3.a. Notice Procedures. -- A notice of violation shall be in writing signed by the Director and shall set forth with reasonable specificity:

16.3.a.1. The nature of the violation;

16.3.a.2. The remedial action required, which may include interim steps;

16.3.a.3. A reasonable time for abatement, which may include time for accomplishment of interim steps, but in no case shall the initial abatement period be in excess of thirty (30) days; and

16.3.a.4. A reasonable description of the portion of the quarrying or reclamation operation to which it applies.

16.3.b. Extension of Abatement Period -- The director may extend the time set for abatement or for accomplishment of an interim step if the failure to meet the time previously set was not caused by lack of diligence on the part of the operator.

16.3.c. Termination --The Director shall terminate a notice of violation by written notice to the permittee when he or she determines that all violations listed in the notice of violation have been abated. Notices of violations shall not be terminated or vacated because of the operator's inability to comply with the terms of abatement.

16.4. Cessation Order for Failure to Abate -- The director may issue a Cessation Order suspending the permit or portion of the permit for failure of the operator to abate a notice of violation within the time specified.

16.5. Cessation Order for Imminent and Substantial Harm -- The director may issue a Cessation Order whenever he or she finds that an ongoing operation is causing or is likely to cause imminent and substantial harm to the environment, public safety or public health.

16.6. Cessation of Operations -- Any cessation order issued by the director, shall order the operation or a portion of the operation to cease and shall remain in effect until the violation has been abated or until modified, vacated, or terminated by the director or the Surface Mine Board or by a court.

16.7. Remedial Measures -- In any cessation order, the director shall determine the appropriate remedial measures to be taken to abate the violation in the most expeditious manner possible and shall set forth these measures, and the time by which abatement shall be accomplished in the order.

16.8. Consent Agreement. -- When the permittee demonstrates that sufficient resources are available to him or her to abate the violation(s), the director may enter into a consent agreement.

16.9. Quarrying Without a Permit -- Quarrying operations conducted by any person without a valid permit constitutes a condition or practice which causes or can reasonably be expected to cause imminent and substantial harm to the environment, public safety, or public health.

16.10. Permittee Responsibility. -- Violations by any persons conducting quarrying operations on behalf of the permittee shall be attributed to the permittee, unless the permittee establishes that they were acts of deliberate sabotage.

16.11. Civil Penalty Determinations.

16.11.a. Violation Assessments. -- The director shall review each notice of non-compliance or order, and determine whether or not a civil penalty will be assessed and the amount of the penalty. The director for each notice of non-compliance or order may assess a separate civil penalty for each day of the violation, beginning with the date of issuance of a notice of non-compliance or order to the date of abatement of the violation. In determining whether or not to assess a separate daily civil penalty and determine the amount of the civil penalty, the director shall consider those factors specified in WV Code §22-4-24(e), and subsection 16.13 of this rule, and may consider the extent to which the operator may have gained any economic benefit as a result of a failure to comply. Any notice of violation which continued unabated for two (2) or more days after the initial abatement period, and

received a civil penalty assessment of three thousand five hundred dollars ($3,500) or more, shall be assessed the penalty amount for a minimum of two (2) separate days. The determination as to whether or not to assess a civil penalty, if the amount is less than one thousand dollars ($1,000), will be at the discretion of the director. Notices of violations with a seriousness rating of four (4) or greater shall be assessed regardless of the amount. Termination of a notice of violation shall not affect the right of the director to assess a civil penalty for those violations.

16.12. Procedure for Assessing Civil Penalties.

16.12.a. Assessment Officer -- Duties. For the purposes of this section, the assessment officer shall not determine the proposed penalty assessment until such time as the director has caused an inspection of the violation to be conducted, and the findings of that inspection are submitted to the assessment officer in writing. The director must conduct the inspection of the violation within the first fifteen (15) days after the notice or order was served. The assessment officer may continue conferences, conduct investigations, and interview witnesses as necessary.

16.12.b. Determination of Civil Penalty Amounts. -- Civil penalty amounts for notices of violation or order shall be determined in accordance with the factors specified in WV Code §22-4-24(e), and the numerical point system in subsection 16.13 of this section. Within fifteen (15) days of service of a notice of violation or order, the person to whom it was issued may submit written information about the violation to the director, and to the inspector who issued the notice of violation or order.

16.12.c. Notice of Assessment. -- The director shall provide a copy of the proposed assessment and the accompanying worksheet to the operator by certified mail within thirty (30) days of the date of the issuance of a notice or order. If the mail is tendered at the address of the person set forth in the permit application, or at any address at which that person is in fact located, and he or she refuses to accept delivery of or to collect such mail, the requirements of this paragraph shall be deemed to have been complied with upon such tender. Failure by the director to serve any proposed assessment within thirty (30) days shall not be grounds for dismissal of all or part of such assessment, unless the person against whom the proposed penalty has been assessed proves actual prejudice as a result of the delay and makes a timely objection to the delay. An objection shall be timely only if made in the normal course of administrative review. The operator may, within twenty (20) days of receipt of notice of assessment, request an informal assessment conference to allow the Assessment Officer to consider the fact of violation and the amount of penalty. The

director shall also give notice including any worksheet, in person or by certified mail, to the operator of any penalty adjustment as a result of an informal conference within thirty (30) days following the date of the conference. The reasons for reassessment shall be documented in the file by the assessment officer. The director shall consider any information submitted by the director, the operator or any affected party in determining the facts surrounding the violation, and the amount of the penalty. Unless a conference has been requested, the director shall review and if necessary reassess any penalty considering facts which were not reasonably available on the date of issuance of the proposed assessment because of the length of the abatement period. The director shall serve a copy of any such reassessment and of the worksheet showing the computation of the reassessment within thirty (30) days after the date the violation is abated.

16.12.d. Notice of Informal Assessment Conference. - The operator shall be notified of the time and place of the informal assessment conference at least five days prior to the conference date. The time and place of an informal assessment conference shall be posted at the nearest Division of Environmental Protection regional office to the operation. Any person shall have the right to attend and participate in the conference. Any person, other than the operator and Division of Environmental Protection representatives, may submit in writing at the time of the conference a request to present evidence concerning the violation(s) being conferenced. Such request shall be granted by the assessment officer if it is determined that the person or persons have been affected by the violation. Should problems arise due to scheduling, the assessment officer may continue the conference to a later time and/or date as the assessment officer deems necessary to honor other scheduled conferences.

16.12.e. Informal Conference. -- An informal conference on the assessment or reassessment must be scheduled within sixty (60) days of the receipt of a request from the affected operator. Failure to hold an informal conference in the time limits specified in this subsection will not be considered as grounds for dismissal of the assessment, unless the operator proves actual prejudice and makes timely objection to the delay. The assessment officer shall consider all relevant information on the violation, including information which may be provided by the director, the operator or any affected party. Within thirty (30) days after the conference is held the assessment officer shall either:

16.12.e.1. Vacate the violation and penalty;

16.12.e.2. Settle the issue, in which case a settlement agreement shall be prepared and signed by the assessment

officer on behalf of the director and by the person assessed;

16.12.e.3. Affirm, raise, lower, or vacate the penalty; or

16.12.e.4. Terminate the conference when it is determined that the issues cannot be resolved or that the person assessed is not diligently working toward resolution of the issues.

16.12.f. Settlement Agreement. -- If a settlement agreement is entered into, the person assessed will be deemed to have waived all rights to further review of the violation or penalty in question, except as otherwise expressly provided for in the settlement agreement. The settlement agreement shall contain a clause to this effect. If full payment of the amount specified in the settlement agreement is not received by the director within the time period specified in the agreement, the director may enforce the agreement or rescind it and affirm, raise, lower or vacate the penalty within thirty (30) days from the date of the rescission.

16.12.g. Rules of Evidence. -- At formal review proceedings pursuant to WV Code §22-4-25, no evidence as to any statement made by one party at a conference shall be introduced as evidence by another party, or may be used to impeach a witness.

16.12.h. Escrow. -- If a person requests an administrative or judicial review of a proposed assessment, the proposed penalty assessment shall continue to be held in escrow until completion of the administrative or judicial review.

16.12.i. Penalty Adjustment. -- When an administrative or judicial review of a civil penalty order results in an order increasing the penalty, the person to whom the notice or order was issued shall pay the amount of the increase within thirty (30) days after the order is received.

16.12.j. Mitigation. -- Unless caused by lack of diligence, inability to comply may be considered in mitigation of the amount of civil penalty.

16.12.k. In Kind Assessment. - The director may accept in kind assessment by reclamation of an abandoned quarry site in lieu of cash payment of civil administrative penalties. The site to be reclaimed shall be approved by the director. The cost of reclamation must be determined by the director to equal or exceed the amount of civil penalty owed. If the cost of reclamation is less that the amount of civil penalties owed, the balance shall be collected pursuant to WV Code 22-4-24.

16.13. Assessment Rates.

16.13.a. History of Violations. -- History of previous violations is an accounting of all notices of violation and orders that were written on the subject operation in the previous twelve (12) months. Notices of violation and orders which were withdrawn or vacated shall not be included in the accounting. The dollar amount to be assessed shall be determined by multiplying the number of violations by a factor of one hundred (100).

16.13.b. Seriousness of the Violation.

1-2 Violation is of an administrative nature resulting in no harm or danger to the environment or public; or the standard is violated to such a minor degree that environmental harm or public danger will not result.

3-4 Violation results in potential or actual harm or danger remaining in the permit area; or in the case where the impact extends beyond the permit area; can be demonstrated that potential danger or harm or will not result.

5-6 Violation extends beyond the permit area and results in a minor degree of potential or actual harm or impact on the public.

7-8 Violation can reasonably be expected to result in an imminent and substantial harm to the environment public safety or public health. A violation which initially has a seriousness rating of seven (7) or higher is one which must be a cessation order, as set forth in subdivision 16.5 of this rule.

9-10 Violation extends beyond the permit area and results in a significant degree of environmental harm or danger to the public.

Rating	0	1	2	3	4	5
Dollar Amount	-	100	200	400	600	900

Rating	6	7	8	9	10
Dollar Amount	1200	1600	2100	2700	3500

16.13.c. Operator Negligence.

0 This violation is considered beyond the control of the operator or his employees, and no negligence can be attributed to

this violation.

1-2 This violation was a result of an oversight on the part of the operator, and may have been avoided if more conscientious effort and/or reasonable care were given.

3-4 This violation was obvious, and/or no action was taken by the operator to prevent the problem.

5-6 The operator failed to adequately respond to previous written instructions of the inspector to prevent this event.

7-8 The operator had been officially notified, in writing, of this problem, and did not make any effort at correcting the problem.

Rating	0	1	2	3	4
Dollar Amount	0	100	225	350	475

Rating	5	6	7	8
Dollar Amount	600	725	875	1000

16.13.d. Operator's Good Faith.

Good faith percentage shall not include a history of violations in the amount. Good faith percentage shall be rounded to the nearest dollar amount.

0 Operator failed to take appropriate remedial action. Violation has been modified to a cessation order.

1-2 Operator took prompt, but insufficient remedial action to fully abate the violation within the required abatement period. Abatement period was extended for just cause. Remedial action was completed prior to the end of the extended abatement period.

3-4 Operator took prompt remedial action and worked diligently to abate the violation. Conditions beyond the operator's control prevented full abatement, and required that the abatement period be extended for just cause. Abatement of the violation was accomplished before the end of the extended abatement period.

5-6 Operator initiated remedial action immediately and expended all reasonable efforts to abate the violation. Violation

was abated before the end of the original abatement period.

7-8 Operator was already taking remedial action at the time the violation was noted, and expended exemplary effort in abating the violation before the end of the original abatement period.

Rating	0	1	2	3	4
%	0%	5%	10%	15%	20%

Rating	5	6	7	8
%	25%	30%	35%	40%

16.13.e. Determination of Penalty Amount.

Seriousness of Violations $_____

Operator Negligence + $_____

Subtotal $_____

Less Good Faith % - $_____

Sub Total $_____

History of Violations + $_____

Total $_____

§38-3-17. Final Release of Bond or Bond Pooling Fund, Final Inspection Report.

17.1. Upon completion of the required reclamation, and after the requirements of the permit have been fully complied with, the permittee shall submit to the director a request for release of the bond or contributions to the bond pooling fund. In no instance shall the request for release be made until the vegetation meets the appropriate evaluation standards in section 10 of this rule.

17.2. The release request shall be on forms prescribed by and furnished by the director.

17.2.a The request for release shall include the following:

17.2.a.1. Accurate final map(s)or aerial photograph(s) in accordance with Section 11 of this rule;

17.2.a.2. Appropriate requests for special land use;

17.2.a.3. A certificate of publication of a Class 1 legal advertisement; and

17.2.a.4. Proof of notification to the surface owner(s).

17.3. A final inspection report shall be prepared and filed following inspection to determine that the operation is in compliance with this rule, the appropriate permit requirements, reclamation and revegetation standards, and that any untreated water discharged from the permit area is in compliance with WV Code §22-11. If acceptable, the director may then cause the permit increment or the permit and the corresponding bond or contributions to the Bond Pooling Fund to be released. Quarry areas that were disturbed prior to June 8, 2000 are exempt from reclamation requirements on those areas, unless otherwise specified.

§38-3-18. State and Federal Compliance.

The issuance of quarrying permit pursuant to WV Code §22-4, as amended, and any rules promulgated thereunder authorizes the operations covered by said permit, but does not release the permit holder from any other legal duties imposed by the laws of this state or these United States.

TABLE ONE

USE: HAY, PASTURE OR OTHER WHERE HERBACAOUS COVER IS DESIRED

1.	Alfalfa	20 lbs.
	Orchard grass	10 lbs.
	Tall Fescue	15 lbs.
2.	Birdsfoot Trefoil	10 lbs.
	Tall Fescue	15 lbs.
3.	Birdsfoot Trefoil	10 lbs.
	Orchard grass	10 lbs.
4.	Orchard grass	20 lbs.
	Red Top	3 lbs.
5.	Crown Vetch	15 lbs.
	Tall Fescue	20 lbs.
	[2]Weeping Lovegrass	3 lbs.
6.	Crown Vetch	15 lbs.
	Rye Grass	15 lbs.
	[2]Weeping Lovegrass	3 lbs.

[1]APPROVED SEED MIXTURES FOR OVER SEEDING TREE AND SHRUB SEEDLINGS

7.	Tall Fescue	30 lbs.
	Birdsfoot Trefoil	15 lbs.
8.	Tall Fescue	20 lbs.
	Rye Grass	10 lbs.
	Birdsfoot Trefoil	15 lbs.
9.	Tall Fescue	20 lbs.
	[2]Weeping Lovegrass	3 lbs.
	Birdsfoot Trefoil	15 lbs.

FOR ELEVATIONS ABOVE 2500

10.	Tall Fescue	20 lbs.
	Red Top	4 lbs.
11.	Tall Fescue	20 lbs.
	[2]Weeping Lovegrass	3 lbs.
12.	Tall Fescue	20 lbs.
	Sweet Clover	10 lbs.

[1]Establishment of vegetation includes liming pH range 5.5-7.0. Application of fertilizer shall be based on soil test results from a soil laboratory. Without a soil test, apply 600 lbs. 10-20-10 or equivalent, and protection from grazing during the seedling state.

[2] Red Top may be substituted for Weeping Lovegrass for late summer and fall seedings at a rate of 3 lbs. per acre.

TABLE TWO

APPROVED WOODLAND PLANT MIXTURES
(Nursery Grown Seedlings)

1.	Black Locust (3000') White Pine	Plant in bands 6 rows or more in width Black Locust not to exceed 50%.
2.	Black Locust (3000') Virginia Pine	Plant in bands 6 rows or more wide Black Locust not to exceed more than 50%.
3.	Scotch Pine White Pine Red Pine (above 2000') Virginia Pine (below 2500')	Use mixture of two or more if available Plant in bands 6 rows or more.
4.	Black Locust (below 3000') Tulip Poplar (below 3000') Sycamore (below 2500') Red Oak	Use up to one-half locust with one or more of hardwood species. Plant in bands 6 or more rows in each species.
5.	Autumn Olive and adapted pine or hardwoods	Where owner's interest is wildlife improvement, plant in bands of 3 to 6 rows preferable with pines or in blocks of one-fourth acre spaced 600' apart.
6.	European Black Alder (below (2500) Sycamore Indigo Bush Autumn Olive	Use these plants where protection from grazing is impractical or protection will not be maintained. For wildlife habitat improvement use 3 to 6 row bands where two or more species are planted.
7.	European Black Alder	Use European Black Alder where pH is near 5.5.
8.	Black Locust	Use only on steep erodible outslopes.
9.	Sweet Crab Apple[1] Washington Hawthorne[1]	On bench of areas where owners primary' interest is wildlife habitat improvement, plant in clumps of 12 spaced 10' to 12' apart. Clumps should be spaced 200' to 300' apart, planted in between with pine, Indigo Bush or Autumn Olive.
10.	Blackberry[1]	Plant on bench spaced 6 x 6 in blocks 100 plants per block.
11.	Grey Dogwood[1] Silky Cornell[1]	On bench near water impoundments spaced 8 x 8.

[1]Should be planted only on the more favorable sites. Preferably a north or northeastern aspect with a pH of 5.5 or above.

TABLE THREE

[1]APPROVED MIXTURES
HERBACEOUS AND WOODY SPECIES FOR DIRECT SEEDING

1.	Tall Fescue	30 lbs.	
	Birdsfoot Trefoil	15 lbs.	
	Black Locust[2]	3 lbs.	
2.	Tall Fescue	20 lbs.	
	Rye Grass	10 lbs.	
	Birdsfoot Trefoil	15 lbs.	
	Black Locust[2]	3 lbs.	
3.	Tall Fescue	20 lbs.	
	Weeping Lovegrass	3 lbs.	
	Birdsfoot Trefoil	15 lbs.	
	Black Locust[2]	3 lbs.	
4.	Orchard grass	30 lbs.	Better suited to higher
	Birdsfoot Trefoil	10 lbs.	elevations above 2500'
	Black Locust[2]	3 lbs.	
5.	Orchard grass	20 lbs.	Better suited to higher
	Red Top	3 lbs.	elevations to 2500'
	Birdsfoot Trefoil	10 lbs.	
	Black Locust[2]	3 lbs.	

[1]Application of fertilizer shall be based on soil testing results from a soils laboratory. Without a soil test, apply a minimum of 600 lbs. per acre of 10-20-10 or 10-20-20. Equivalent amounts of nitrogen and phosphorus is acceptable.

[2]Black Locust seed may be omitted on the bench areas or where erosion is not a serious problem, or at elevations above 2000', 1/4 lb./acre Virginia Pine; 1/4 lb/acre White Pine, and 3 lbs./acre Japonica Intermedia may be substituted for Black Locust.

TABLE FOUR

---

[1]APPROVED MIXTURES FOR WATERWAYS, DIVERSIONS
DRAINAGE STRUCTURES, HAULAGEWAYS, HIGHWALL ACCESS, ETC.

1.	Tall Fescue	50 lbs.
	Birdsfoot Trefoil	10 lbs.
	Red Top	3 lbs.
2.	Perennial Rye Grass	20 lbs.
	Tall Fescue	30 lbs.
	Birdsfoot Trefoil	3 lbs.
3.	Tall Fescue	40 lbs.
	Crown Vetch	15 lbs.
	Red Top	3 lbs.
4.	Tall Fescue	50 lbs.
	Crown Vetch	15 lbs.
5.	Tall Fescue	30 lbs.
	Reed Canarygrass	20 lbs.
	Red Top	3 lbs.

NOTE: Weeping lovegrass at 3 lbs. per acre may be substituted for Red Top for spring and early summer seedlings on well drained areas.

[1]Application of fertilizer shall be based on soil test results from a soils laboratory. Without a soil test, apply a minimum of 600 lbs. per acre of 10-20-10 or 10-20-20. Equivalent amounts of nitrogen and phosphorus fertilizer is acceptable.

TABLE FIVE

[1]ANNUAL AND BIENNIAL COVER CROPS FOR TEMPORARY COVER

- Grasses -	Suggested Rates of Application - Pounds In Acres	Seeding Season
Balbo Rye	30 - 60	Fall
Abruzzi Rye	30 - 60	Fall
Wheat	30 - 60	Fall
Oats	30 - 60	Fall
Japanese Millet	10 - 15	Summer
Millets - German, Foxtail	10 - 15	Summer
Sudan Grass - Sorghum Hybrid	10 - 20	Summer
Pearl Millet	10 - 20	Summer
Sudan Grass	10 - 20	Summer
Annual Rye Grass	10 - 15	Spring or Fall
- Legumes -		
Kobe Lespedeza	5 - 10	Summer
Korean Lespedeza	5 - 10	Summer
Hairy Vetch	20 - 40	Fall
Sweet Clover	10 - 20	Summer
- Forbs -		
Buckwheat	30 - 60	Summer

[1]Application of fertilizer shall be based on soil test results from a soils laboratory. Without a soil test, apply a minimum of 600 lbs. per acre of 10-20-10 or 10-20-20. Equivalent amounts of nitrogen and phosphorus fertilizer is acceptable.

Division of Environmental Protection

Public Hearing: Office of Mining & Reclamation – 38CSR2 & 38CSR3 **Time/Date:** Aug. 21, 2000 6:00 pm

	NAME	ADDRESS	COMMENT YES	COMMENT NO
1.	Howard Hong	PO Box 586 Bluefield VA 24605	✓	
2.	Ed Treadway	P.O. Box 1284 Beckley, W.Va. 25801	✓	
3.	Dennis Heras 38CSR3	302 Kent Oaks Way, Gaithersburg, MD 20878	✓	
4.	Bill Kerns	PO Box 1209 Morgantown, WV 26507	✓	
5.	Pat Parsons	2114 Kanawha Blvd, E Chas 25311		✓
6.	Mike Clowser	" " " " "	✓	
7.	Terry Gould	188 Fayette St Buckhannon WV		✓
8.	Barry Hay Coal Reg. Begin	P.O. Box 397 Glenville, WV 26351		✓
9.	Chris Hamilton	WV Coal Association	Probably	
10.	Ben Greene	1324 Kanawha Blvd. E. Charleston W.Va. 25311	✓	
11.	Ka Ward 38CSR2	Charleston Gazette, 1001 Virginia St, E, Chas WV		✓
12.	Lewis Halstead	WVDEP		
13.	Lynda Miller	WV DEP		
14.	Cindy Lawson	WV DEP		
15.				

ORIGINAL

BEFORE THE WEST VIRGINIA DIVISION OF
ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY

In the matter of:

PUBLIC HEARING ON PROPOSED LEGISLATIVE RULE

38 CSR 3 - **"Rules for Quarry and Reclamation."**

Transcript of proceedings had at a public hearing in the above-styled matter taken by Missy L. Young, Certified Court Reporter and Commissioner in and for the State of West Virginia, at the West Virginia Division of Environmental Protection, Training Room, located at 10 McJunkin Road, Nitro, West Virginia, on the 21st day of August, 2000, pursuant to notice.

P R O C E E D I N G S

MS. CHANDLER:

This public hearing will now come to order on this the 21st day of August, 2000 at the West Virginia Division of Environmental Protection's Training Room located at 10 McJunkin Road, Nitro, West Virginia. The purpose of the public hearing is to receive comments on the Office of Explosives and Blasting Proposed Rule filed in the Secretary of State's Office on July 20, 2000 and noticed in the State Register on July 28, 2000. The proposed legislative rules are 38CSR2 and 38CSR3.

This public hearing is being held pursuant to the provisions of 29A-3 of the WV Code.

My name is Jeanne Chandler of the Public Information Office of the WV Division of Environmental Protection. I will be the moderator for these proceedings.

The hearing procedure this evening will be to introduce the rule and allow time for oral comments. Written comments for any rule may be submitted at the end of this public hearing. For those of you wishing to make oral comments, a sign-up sheet has been provided. Please sign-up now if you have not already done so. Please limit your comments to five minutes. The comment period ends at

the conclusion of this hearing tonight. Your comments will be made a part of the rulemaking record.

The Court Reporter is Ms. Missy Young. If anyone desires a transcript of this proceeding, please contact Ms. Young at 984-2300.

The purpose of this public hearing is to accept comments on 38CSR3 - "Rules for Quarry and Reclamation".

This proposed legislative rule establishes general and specific requirements for quarrying and reclamation operations, including permit applications, bonding, blasting, drainage control, method of operation, excess spoil disposal, revegetation, mapping, transfer of permit rights, public hearings, permit renewals, modifications, inspections and enforcement, and state and federal compliance.

The proposed rule specifies the requirements for implementation and compliance with the newly-enacted HB4055, Quarry Reclamation Act, which became effective June 8, 2000. Without these rules, the ability to issue permits, conduct inspections and monitor compliance would be severely hampered.

The floor is now open for public comments. Please identify yourself and affiliation, if any, prior to making comments.

MR. CLOWSER: Thank you. My name is Mike Clowser. I'm the Executive Director of the West Virginia Press Aggragates Council and Division of the Contractors Association of West Virginia.

We are pleased today to have the opportunity to present our comments on the proposed regulations for the quarry legislation. And when you go back and you look at what's transpired since the passage of 4055, in the Legislature this year, there certainly -- we have come a long way in addressing the Quarry Industries concerns, the Environmentals concerns, the Environmentalists concerns and, certainly, those of the WV Division of Environmental Protection. We have had the opportunity to review the proposed regulations, and by-in-large, we feel that the Department has done a very good job in developing and presenting the regulations based on HB4055. I think, as everybody's aware, there was a lot of give and take in the development of the bill. The industry certainly gave a lot of areas that are far and above beyond what the industry has currently been doing. Certainly, the environmental community has offered tremendous comments, and I think a lot of their issues were able to be addressed, and quite frankly, some of the things they compromised on, I think helped in the passage of the bill.

Certainly, DEPs involvement, as well as the Legislature, I think has gotten us to this point. So, I think that with that we were able to develope a legislation that, while everyone did not agree with, certainly everybody came away with an agreement and we all signed off on it and I think we are moving ahead with the implementation of that legislation, with the development of the rules and regulations.

Our only goal in reviewing the regs, is to make sure that they are consistent with the agreements that were reached in HB4055. There were a number of areas that, as I said earlier, everybody, I think, gave a little bit on and everybody compromised a little bit on for the full purpose of getting the legislation passed and it is our desire to work with the regulations to make sure that they, indeed, follow the intent and follow the language that was agreed upon in the legislation.

We would hope to work with the environmental community over the next four to five months, we would hope to work with DEP over the next four or five months, to get the regulations to where, like the bill, it is an agreed to piece of legislation that we can put in and we can move forward to get the rules implemented and to make sure that all quarry operators know the rules, they know what to

work under and they have some assurances as to the operation in which they will work under.

With that, that concludes my comments. We will be presenting written comments on various aspects of the legislation and we look forward to working through the process over the next four or five months to implement them. Thank you.

MS. CHANDLER: Thank you, Mr. Clowser. Would anyone else like to comment?

There being nothing further, the hearing for 38CSR3 is now concluded.

(WHEREUPON, the public hearing was concluded.)

BEFORE THE WEST VIRGINIA DIVISION OF
ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY

STATE OF WEST VIRGINIA,

COUNTY OF KANAWHA, to-wit:

I, the undersigned, Missy L. Young, a Certified Court Reporter and Commissioner within and for the State of West Virginia, duly commissioned and qualified, do hereby certify that the foregoing is, to the best of my skill and ability, a true and accurate transcript of all the proceedings had in the aforementioned matter.

Given under my hand and official seal this 23rd day of August, 2000.

Missy L. Young

Certified Court Reporter
Commissioner for the State of West Virginia

My commission expires April 15, 2008.

Director's Office
#10 McJunkin Road
Nitro, WV 25143-2506
Telephone No: (304) 759-0515
Fax No: (304) 759-0526

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

August 28, 2000

The attached is not a rule, but contains portions of a rule with comments and DEP responses.

Dr. Charles "Larry" Harris
637 Grand Street
Morgantown, WV 26505

RE: Proposed Amendments to 38CSR3 - Rules for Quarrying and Reclamation

Dear Dr. Harris:

Thank you very much for submitting comments on the proposed quarry rules.

Effluent limits and reporting requirements are established through the NPDES program for all water discharge from quarry operations. In addition, conditions not allowable are set forth in the state's Requirements Governing Water Quality Standards (46CSR1-3).

Therefore, any condition not allowable, including the deposition of bottom fines, would be a violation of the above-mentioned rule and is enforceable through the West Virginia Water Pollution Control Act (Chapter 22, Article 11 of the West Virginia Code). Accordingly, we have not included any additional requirements regarding "bottom fines analysis" in the proposed quarry rules.

If you have any questions, please feel free to contact me.

Sincerely,

Harold M. Parsons, Jr.
Program Administrator

HMP:sh

From: "Charles L. Harris" <clharris@mail.hsc.wvu.edu>
To: "CARRIE CHAMBERS" <CCHAMBERS@mail.dep.state.wv.us>
Date: Fri, Jun 30, 2000 1:10 PM
Subject: Re: Quarry Rules

>Attached is 38CSR3 - the proposed new rules for Quarrying and Reclamation.
>
My concerns for quarries are related to degradation of nearby streams and water tables. Where limestone is located the quality of streams is generally high, often being trout streams. Quarries can alter the quality of the stream water through siltation and the quantity through alterations of the water table due to blasting. Hence, we want to make sure that the rules adequately address these two issues.

I think that the water quality baseline studies should include a bottom fines analysis of receiving streams. Duffield of the Forest Service has established a direct relationship between the % of fines in stream sediment and the biological productivity of the stream. Having a baseline value for the receiving stream, and requiring monitoring to assure that this figure is not increased to the point where productivity is altered, would be a suitable protection for the stream. Part of 3.5 section of rules.

Other comments:

2.17 I object to calling streams natural drainways, even though the USGS calls them that. This nomenclature lowers the status of streams to drains, which are essentially industrial conduits or pipes. Very often these streams are manipulated in a way that destroys habitat and degrades the productivity of that stream.

59

6.6: Is there any preblast assessment or survey of the groundwater level?

Charles "Larry" Harris
637 Grand Street
Morgantown, WV 26505
Phone: 304-296-4954 (home) 304-293-7749 (work)
Fax: 304-293-6846

Director's Office
#10 McJunkin Road
Nitro, WV 25143-2506
Telephone No: (304) 759-0515
Fax No: (304) 759-0526

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

July 25, 2000

Dr. Charles "Larry" Harris
637 Grand Street
Morgantown, WV 26505

RE: Proposed Amendments to 199CSR1 - Rules for Quarrying and Reclamation

Dear Dr. Harris:

Thank you for your comments concerning the proposed Rules for Quarrying and Reclamation during the recent Advisory Council meeting held on July 6. The newly-enacted quarry legislation was developed through a stakeholders' process where representatives of industry, state agency, and citizen's groups met and negotiated the provisions of HB 4055.

One of the primary issues negotiated was the protection of surface and ground water. As a result of this concern, new quarry permits are required to conduct a pre-quarry water assessment to establish the base level quality and quantity of surface and ground water. A ground water monitoring program must be developed for each permit. Likewise, surface water monitoring and effluent limits are established through the NPDES Program for all water discharged from the site.

While the NPDES Program does not provide for an analysis of bottom finds for receiving streams, discharge limits are established for suspended and total dissolved solids. DEP also monitors for conditions such as staining

discoloration, and sedimentation which are not allowed in receiving streams. In addition, new requirements for pre-blast surveys require an analysis of water supplies and information relating to the quantity and quality of water use in the area, and there are provisions for water rights replacement.

While I agree with your concern of calling streams "natural drainways", we have not changed that nomenclature because it is established and accepted terminology. I feel that the Act and proposed Rule provide for the monitoring and protection of all water resources, which may be adversely affected by quarrying.

I hope that I have adequately addressed your concerns. If you have any additional questions or concerns, please do not hesitate to let me know.

Sincerely,

Harold M. "Rocky" Parsons, Jr.
Assistant Chief, OMR

cc: DEP Advisory Council Members
Director Michael C. Castle

From: "Charles L. Harris" <clharris@mail.hsc.wvu.edu>
To: DEP_EMAIL.PHILIPPI_PO(H Parso)
Date: Thu, Jul 27, 2000 9:32 AM
Subject: Quarry Bill

Dear Mr. Parsons:

I am in receipt of your letter regarding the new quarry bill (dated July 25) and thank you for your response. I think the quarry bill is a very positive step for the DEP, which, if enforced, will protect our streams from degradation. The enforcement issue is a concern to me and that is why I suggested that bottom fines analysis should be included in the assessment. I wish that I had been able to be present at the Advisory Council Meeting to better explain my concerns. Basicly, the bottom fines analysis accomplishes a similar end result as benthic monitoring would do (which should also be assessed). Violations of water quality standards generally occurs when no one except the operators are present. Heavy rains muddy just about every stream in the State and especially those where disturbances are present. When the rains stop and the water clears, little evidence of violations remain.

Duffields' data (and there may be other data out there) show that the bottom fines percentage (measured by sieving) are an excellent indicator of both siltation events and the health of the stream. The same can be said of benthic analyses. A monitor can compare bottom fines to baseline data to get an idea of siltation events that were unseen or unreported. In my view, the use of these tools would increase the effectiveness of the DEP since there simply are not enough field monitors to catch operators in violation. In addition, you would be able to keep a record on the health of the stream. In this regard, when bottom fines approach 40% of a shovel sample, the biological productivity of the stream is approaching zero. When the value is 25-30% the stream is threatened, and so on. Hence, if an operation is killing a stream you would know it, even if the sun is shining.

I would like these comments to be reported at the Public Meeting in August, which is scheduled at a time when I am involved in teaching. Thanks for the opportunity to make these comments.

Sincerely,
Larry Harris

Charles "Larry" Harris
637 Grand Street
Morgantown, WV 26505
Phone: 304-296-4954 (home) 304-293-7749 (work)
Fax: 304-293-6846

CC: DEP_EMAIL.NITRO1_PO(M_CASTL)

Office of Mining and Reclamation
10 McJunkin Road
Nitro, WV 25143
304-759-0510
304-759-0528

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

August 28, 2000

The attached is not a rule, but contains portions of a rule with comments and DEP responses.

Mr. John C. Hemple
Post Office Box 47
Dailey, West Virginia 26259

Dear Mr. Hemple:

Thank you very much for submitting comments on the proposed quarry rules. Attached please find DEP's responses to your comments. Those comments which were accepted by DEP have been included in the latest draft being filed with the Secretary of State's Office.

If you have any questions, please feel free to contact me.

Sincerely,

Harold M. Parsons, Jr.
Program Administrator

HMP:sh
Attachment

DRAFT 6-20-00

TITLE 38
LEGISLATIVE RULES
BUREAU OF ENVIRONMENTAL PROTECTION
OFFICE OF MINING AND RECLAMATION

SERIES 3
RULES FOR QUARRYING AND RECLAMATION

(DEP Response - The heading is changed to "Bureau of Environment")

§38-3-1. General.

1.1. Scope. -- This Legislative rule establishes general and specific rules for quarrying and reclamation operations including requirements for definitions, permit application requirements and contents; bond and bond pooling fund; haulageways and transportation facilities; blasting; drainage system; method of operation; excess spoil disposal; revegetation and standards for evaluating vegetative cover; mapping, approved person, and markers; transfer or sale of permit rights; public hearings, annual progress report map and permit renewals, permit modification; inspection and enforcement; final release of bond or bond pooling fund, final inspection report; state and federal compliance.
DEP response - DEP agrees "hearing" is changed to "hearings"

1.2. Authority. -- WV Code §22-1-3 and §22-4-1.

1.3. Filing Date. --

1.4. Effective Date. --

§38-3-2. Definitions.

Unless the context in which used clearly requires a different meaning, as used in this rule or as referred to in WV Code §22-4 as amended:

2.1. Acid-producing materials means mineral compounds which will, when acted upon by water and air, cause acids to form.

2.2. Acid-producing overburden or spoil means material that may cause spoil which upon chemical analysis, shows a pH of 5.5 or less.

2.3. Active operation means any operation where land is being

disturbed, a mineral is being removed, processed, or where a permit is currently sitting in an idle status but not granted inactive status.

DEP response - DEP disagrees. This proposed change is not needed as it would confuse the issue of abandoned quarry and the requirement to obtain inactive status for any operation that has been inactive for six months.

2.4. Approved person means any person approved by the director in accordance with subsection 11.6. of this rule.

2.5. Backfilling means to place disturbed material back into an excavation and return the area to a predetermined slope.

DEP response - DEP agrees. The definition is changed to read "…to place spoil material…"

Insert- Berm - use the dffinition in act

DEP response - This term is defined in the Act. It is not necessary to repeat the definition in these Rules.

Insert- Buffer Zone means an undisturbed border along or around an intermittent or perennial stream.

DEP response - DEP agrees. The definition, as modified by DEP, is included in the proposed rule. "…along or around a public road, stream, lake, public park, or public or private property."

INSERT—Collection ditch—A man made ditch used for collecting sediment laden water and conducting the collected water to an approved E&S control facility.

DEP response - This definition is not needed. The definition of "diversion ditch" includes ditches used for collecting water. Diversion ditches are commonly used as a part of the approved drainage system to divert water to a sediment control structure.

2.6. Cut means ~~an~~ bench or box shaped excavation made ~~by excavating~~ with mining equipment to remove overburden or mineral products ~~in a single progressive line.~~ from the advancing side of a quarry pit.

DEP response - DEP disagrees. A cut may be in a configuration other than a bench or box shape and may be developed with excavation equipment other than mining equipment.

2.7. Cut-fill means overburden removed from an elevated portion of a road or bench and deposited in a depressed portion of the same road in order to maintain a desired width or grade.

DEP response - DEP disagrees. A cut-fill may be an excavation other than a road. Cut-fills are commonly used to develop mine benches.

2.8. Deep mining or underground mining means quarrying where mineral extraction occurs primarily underground using deep mining techniques and causing minimal disturbance of the surface.

DEP response - DEP agrees, the definition is changed.

Insert Design storm event means the predicted precipitation event of a given intensity, frequency, and duration as defined for the permit area by NOAA data.

DEP response - The term "design storm event" does not appear in the Act or these rules and, therefore, does not need to be defined. However, the design storm event for any given county in the state is calculated using the Technical Handbook.

Insert Disturbed area—Use definition from act

DEP response - There is no need to repeat the definition from the Act.

2.9. Diversion ditch means a machine-made or natural waterway used for the collecting and diverting of water away from a disturbed area in the operation or a ditch designed to change the actual or normal course of water.

DEP response - DEP disagrees. Diversion ditches have many purposes and are not limited to diverting water away from a disturbed area.

2.10.Downslope means that area between the ~~crop line of~~ the lowest proposed mining related construction area and a valley floor.

DEP response - DEP agrees. The definition will is changed to include "…mining related construction <u>or excavation</u> area…"

2.11.Drainage plan or drainage control plan ~~system~~ means the proposed method of, diverting waters away from disturbed areas, collection of sediment laden waters, treatment of, and discharge of

all waters entering ~~within~~ the affected permit area, as defined by the approved permit.

DEP response - DEP agrees to change the definition to include the "…method of diversion, collection…"

2.12.Excess spoil means overburden or waste rock removed during mining but not needed for reclamation ~~and~~ which is placed in a location other than within the pit.

DEP response - The definition is changed to "…overburden or ~~waste rock~~ spoil not ~~needed~~ used for reclamation…" Spoil includes material that is removed by excavating equipment.

Insert-Freeboard-The vertical distance between the water surface elevation experienced during the design flood and the crest of a pond.

DEP response - The term "freeboard is not found in either the Act or these regulations. Freeboard is a term used in the Technical Handbook in the design of drainage control structures.

Insert Ground Water means any subsurface water flowing through fractures, joints, caves or within the zone of saturation.

DEP response - The definition of "groundwater" from the Groundwater Protection Act is inserted. Groundwater means the water occurring in the zone of saturation beneath the seasonal high water table, or any perched water zones

2.13.Haulageway or haulroad means any road located within the permit area that is constructed, improved, or maintained by the operator for the purpose of; transporting mineral products, overburden, spoil, employees, or equipment to and from the mine site.

DEP response - This rewording of the definition does not appear to substantially change its meaning or intent. Other than inserting the word "equipment", the definition is not changed.

2.14. 2.14 Highwall means the vertical or near vertical wall on the upper side of a mined area consisting of the exposed strata after excavating operations.

DEP response - DEP disagrees. Highwalls do not always occur on the upper side of a mined area.

Insert-- Inactive permit- Is a permit that has been granted inactive status by the director. The permit is still in effect but no mining is taking place while in inactive status.

DEP response - "Inactive operation" is defined in the Act and does not need to be repeated in these Rules.

Insert - Infiltration means the flow of or movement of surface water into the subsurface or ground water system.

DEP response - The definition is inserted.

2.15. Infrequently used access road means any road that is constructed for and used only to provide infrequent service to facilities used in support of; quarrying, reclamation activities or other limited use activities and is not required for the post-quarrying land use.

DEP response - DEP agrees. The definition is changed.

Insert Manufacturing- Use definition in act

DEP response - There is no need to repeat the definition in these Rules.

2.16. Monument means a permanent marker consisting of metal concrete or wood used to identify the boundary or entrance to a permit area ~~being quarried~~. Entry Monuments should be constructed of a two inch (2") pipe, concrete or wood post ~~driven three feet (3') into the earth~~ with a minimum of four feet (4') exposed, and a two foot (2') X three foot (3') sign affixed to the top of the pipe with company name, address, phone number and permit number permanently affixed. Permit or End of Quarry Marker monuments shall be driven into the earth with a minimum of three feet (3') exposed to permanently mark the beginning and ending points of the area under permit. They shall be identified by painting the exposed portion of the pipe red. Any suitable equivalent substitute may be approved by the inspector.

DEP response - DEP agrees. A modified version of the proposed definition is used. Monument means a permanent marker consisting of metal, concrete or wood used to identify the boundary or entrance to a permit area. Entry monuments shall be constructed of a two inch (2") pipe, concrete or wood post with a minimum of four feet (4') exposed, and a two foot (2') X three foot (3') sign affixed to the top of the pipe with the company name, address, phone number and permit number permanently affixed. Permit or End of Quarry monuments shall be set into the earth with a minimum of

three feet (3') exposed, painted red, and shall mark the beginning and ending points of the area under permit. Suitable substitutes may be approved by the director.

2.17.Natural drainageway means any non-man made watercourse or channel, which carries surface water within a watershed. All streams classified by the United States Geological Survey stream classification ~~of~~ as perennial or intermittent streams shall be considered ~~as~~ natural drainways.

DEP response - DEP prefers to retain the existing definition which has been used for more than fifteen years.

2.18.Operation means the area in which quarrying is permitted or being conducted.

DEP response - A quarry operation may not necessarily be on a permitted area. The director is authorized to take enforcement action to cease operations that are not permitted.

Insert—Operator means any person or company who is granted or who should obtain a permit to quarry or undertake activities covered by the act.

DEP response - "Operator" is defined in the Act.

2.19.Outer slope ~~means~~ is the disturbed area extending from the outer ~~point~~ edge of a quarry bench to the extreme lower limit of the disturbed land.

DEP response - DEP agrees, the definition is changed.

2.20.Overburden means the earth, rock and other materials lying ~~in the natural state above a mineral deposit.~~ Stratagraphicly or physicaly above the unit being mined.

DEP response - Materials lying in the natural state will be stratigraphically or physically above the unit being mined.

Insert permit area—use definition from act

DEP response - There is no need to repeat the definition in these Rules.

2.21. Pit means that part of the quarry mining operation from which the mineral is being actively removed or has been removed.

2.21.Processing means the crushing, sizing, screening, mixing manufacturing or washing of the mineral.

DEP response - The definition of quarrying excludes manufacturing areas. Processing areas are considered part of the quarrying operations.

2.23.Pollution means any water discharge in violation of the National Pollution Discharge Elimination System permit, permit standards, or any ~~other~~ applicable water quality standards.
Add a clean streams act site here

DEP response - The clean streams program is administered under Article 11. DEP may impose <u>other</u> standards, such as monitoring seeps and springs.

3.3. Re-grade or grade means to change the contour of any surface by the use of leveling or grading equipment.

Insert -Sediment control pond means an impoundment designed to control and remove sediment from the water leaving a site before it is discharged into a natural water course.

DEP response - Sediment control structures are defined in the Technical Handbook.

2.25Seepage ~~water means any water entering the ground from the surface through capillary action, cracks, faults or any other natural modes of entry, and finding its way to the surface again.~~

Seepage or seepage water refers to minimal amounts of water that exit the ground from non-specific sources or small springs.

Note: Define Insurgent water as water entering the subsurface strata via cracks, faults, joints, caves etc.

Define resurgent water as water exiting the subsurface strata from specific and non-specific sources.

DEP response - The terms insurgent and resurgent are not found in either the Act or these Rules. DEP prefers to retain the existing definition of seepage because it is all inclusive.

2.26. Serious violation means a violation, that after an informal conference on the assessment has been held, ~~which~~ is

rated at a seriousness level of eight (8) or higher.

DEP response - DEP agrees, the definition is changed.

2.27.Slope ~~means the angle of repose from the horizontal plane of spoil banks or ridges of overburden material made in the quarrying operation; the angle of a hill or mountain~~. Refers to the angle or ratio of decent or assent from a horizontal plain. This ratio is often expressed as the number of feet or meters of vertical change in a fixed horizontal distance. Example: 2:1 is 2 feet of horizontal distance for each one foot of vertical change. Slope may also be described as a percent measurement or as a degree of slope. A gentle slope is defined as zero percent (0%) to ten percent (10%) (10:1); a moderate to steep slope shall mean ten percent (10%)(10:1) to forty-five (45%) (2.2:1; extremely steep slope shall mean forty-five (45%)(2.2:1) and over. Slopes of hillsides and natural areas are generally described using a percent of slope figure while pond walls cut slopes and embankments are often described using the ratio method.

DEP response - DEP prefers the existing definition which establishes the steepness of slope using percent.

2.28.Spoil means material of any natural (other than topsoil) material which overlays the mineral being mined, ~~which~~ that is removed or displaced by excavating equipment, blasting or any other means during mining; It is composed of material of any kind which is separated from the mineral being mined as undesirable to the current product.

DEP response - The definition is changed to exclude topsoil.

2.29.Stabilize means to fix in place soils or disturbed materials by mechanical or vegetative means, including the compaction of placed materials, planting of trees, grasses, vines, shrubs, or legumes.

DEP response - Highwalls, as well as soils or disturbed materials, may need to be stabilized. Mechanical means includes compaction.

2.30.Storm water means any water flowing over, around, or through the permitted area in response to a precipitation event; generally this includes all surface run off.

DEP response - DEP agrees, the definition is changed.

2.31. Surface water means ~~that~~ water, from whatever source, which is flowing on the surface of the ground.

2.32. Suspension of permit means an act of the director temporarily nullifying the validity of a permit insofar as the quarrying, processing and removal of minerals are concerned.

2.33. Technical Handbook means "The Technical Handbook of Standards and Specifications for Erosion and Sediment Control, Excess Spoil Disposal, Haulageways" for mining operations in West Virginia.

2.34.Water analyses means ~~those~~ any water ~~analyses~~ tests performed by or for the operator, by DEP, or by outside parties using the analytical procedures set forth in the most current edition of "Standard Methods for the Examination of Water and Wastewater".

DEP response - The definition is changed to read; "Water analyses means any water tests or analysis performed using the analytical procedures set forth in the most current edition of "Standard Methods for the Examination of Water and Wastewater"

§38-3-3. Permit Application Requirements and Contents

3.1. Advertisement.

3.1.a. Advertisement Information. -- Each advertisement shall contain at a minimum a clear and accurate location map showing the permit site and boundrarys. This map shall be of a scale and detail typically found on the West Virginia County Highway Maps. The map size shall be at a minimum four inches (4") x four inches (4"). The map shall contain ; A north arrow, longitude and latitude lines ~~shall be~~ indicating the project location on the map~~, and~~ such lines shall cross at or near the center of the proposed permit area;

DEP response - This paragraph shall be changed to require the location map to show the permit site.

3.1.b. Certification of Publication. -- The advertisement and publication dates for all permit applications, permit renewal applications, applications for modification of a permit, and transfer assignment and sale of permits, shall be certified and notarized by the publishing newspaper. The certificate of publication shall be made a part of the application no later than two (2) weeks after the last date of publication.

3.1.c. Readvertisement. -- After an application has been advertised in accordance with WV Code §22-4-6(b) and is determined by the director to have had a limited number of minor changes that do not significantly affect the health, safety or welfare of the public, the method of operation, the quarrying and reclamation plan, or the original advertisement, he or she may require one (1) additional advertisement to be published with a ten (10) day public comment period. Significant changes to the permit application which ~~do~~ may ~~significantly~~ affect the health, safety or welfare of the public, the method of operation, the quarrying and reclamation plan or the area to be mined ~~original publication~~ shall require a full re-advertisement in accordance with WV Code §22-4-6(b).

DEP response - The suggested rewording of this paragraph does not alter its meaning or intent. The last sentence is changed to read; "…full re-advertisement in…"

3.1.d. Renotification. -- A renotification letter shall be sent to all commentors and adjacent land owners of a quarry mining application when a determination has been made by the Director that full readvertisement is required.

DEP response - Adjacent landowners are not required to be notified in the original permit application.

3.2. QMA File Number. -- Prior to the publication of an advertisement for a quarry permit in accordance with WV Code §22-4-6(b), the applicant shall submit a administratively and technically complete quarry permit application and obtain a quarry mining application (QMA) file number. Each QMA number shall be valid for one year; provided, that the director may extend a QMA number beyond one year, if the applicant has diligently pursued the application. In order for a QMA number to be extended, the applicant must submit to the director a written request, which shall state the reason(s) and which shall demonstrate good cause for the extension.

DEP response - The Section 6 of the Act requires that the director determine that the application is complete and contains the information required.

3.4. Fees. -- The one thousand-dollar ($1,000) permit application fee shall be paid prior to the issuance of the QMA number. The one thousand-dollar ($1,000) fee for the original permit shall be paid prior to the issuance of the permit. All fees shall be in the form of a cashier's check, certified check or bank money order.

3.4. Fish and Wildlife Resources Information.

3.4.a. Each new permit application and major modification shall include fish and wildlife resource information for the permit area and adjacent area. The scope and level of detail for such information shall be determined by the director in consultation with state and federal agencies with responsibilities for fish and wildlife resources but at a minimum discuss the presence of any endangered, threatened or protected species in the permit area.

DEP response - The DEP requires that the operator contact the Dept of Natural Resources' Wildlife Resources office for a Lands Inquiry Response. The inquiry includes an area of six miles radius of the operation conducted by the Mining Coordination Biologist who is notified of the pre-inspection.

3.4.b. Endangered Species. -- When the proposed quarrying operation ~~will~~ may affect threatened or endangered species of plants or animals or their critical habitats, the applicant shall submit information how habitats will be protected, describe control measures, management techniques, and monitoring methods to be employed in order to protect or enhance such species and habitats. Endangered or threatened species are as listed by the Secretary of Interior under the Endangered Species Act of 1973 (16 U.S.C. 1521 et seq.).

DEP response - Section seven of the Act requires the director to deny a permit if it violates any federal or state law, including the Endangered Species Act.

3.4.b. Notice to Governmental Agencies. -- Upon receipt of an application for a quarry permit, the director shall notify all federal , ~~or~~ state or local government agencies with authority to issue permits and licenses applicable to the proposed quarrying operation or those agencies with an interest in the proposed operation, including the local U. S. Army Corps of Engineers District Engineer, state and federal fish and wildlife agencies, and the State Historic Preservation Officer.

DEP response - DEP agrees, local government notification will be required as applicable.

3.4.d. Effect on Historic Places and Archaeological Sites. -- Where the proposed quarrying operation will adversely affect any publicly owned park, any place listed on the national register of historic places or archaeological sites, the director

shall transmit to the federal, state or local agencies with jurisdiction over the park or historic place the applicable parts of the permit application, together with a request for the agency's approval or disapproval of the operation. Consideration and coordination of the permit review shall be in accordance with the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.) and the Archaeological Resource Protection Act of 1979 (16 U.S.C. 470 et seq.). A permit for such operation shall have joint approval of all affected agencies. Failure of the agency to respond to the director's request within a prescribed time period shall constitute approval.

NOTE: Rocky you should comply with federal section 106 in this section see OSM Pittsburgh office for details

3.5. Pre-quarry ~~water~~ Hydrologic Assessment.

3.5.a. Each new application for a quarrying permit shall contain a pre-quarry ~~water~~ hydrologic assessment. The assessment shall be ~~based on~~ developed using base line information developed over a continuous six (6) month sampling period. ~~from~~ Sampling and analysis of surface and groundwater ~~at~~ monitoring sites shall be established ~~on~~ within or near the permit area and on adjacent areas in a manner that will best discribe the hydrologic conditions of the permit application area. The pre-quarry water assessment shall at a minimum include the following information:

DEP response - DEP agrees. The statute refers to a "water" rather than a hydrologic assessment. Otherwise most of the recommended changes are made to this paragraph.

3.5.a.1. The location of ~~the~~ all sampling sites shall be shown on the proposal or drainage map;

DEP response - DEP agrees the word "all" is added .

3.5.a.2. Water quality descriptions including information on total suspended solids, total dissolved solids, specific conductance, pH, turbidity, acidity, alkalinity, sulfates, total iron, total manganese and aluminum. Information submitted should be sufficient to demonstrate seasonal variations in springs and surface waters. ~~provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; provided further, that a~~ The department may accept data from nearby monitoring sites that do not include all the above constituents. A limited number of validation samples may be required;

DEP response - Due to comments received by others concerning the Rules exceeding the intent of the Act, the seasonal variation language for groundwater is changed to six-month monitoring.

3.5.a.3. Water quantity descriptions shall include; seasonal flow rates of springs, streams, variation in flow rates, water usage information surface and ground water flow directions and/or the elevation of water levels in test wells. At a minimum two ground water monitering sites (one up dip and one down dip of the quarry) are required but additional sites may be requested by the director. Water monitering shall occur as defined in the act.

DEP response - Due to comments received by others concerning the Rules exceeding the intent of the Act, the seasonal variation language for groundwater is changed to six-month monitoring of test sites above and below gradient (22-4-14).

3.6. Cross-Sections.

3.6.a. Typical cross-sections shall be prepared which ~~indicate~~ illustrate the configuration of the permitted area before, during and after quarrying.

DEP response - DEP agrees.

3.6.a These cross-sections shall depict the rock strata, mineral to be mined and the mining cuts,berms or other features.

DEP response - Cuts should be shown in the Quarrying and Reclamation Plan. Berms may be too small to show in cross-section. Most major features should show in the cross-section.

3.7 Consolidation of Permits.

3.7.a. Multiple permits which are consolidated under one All-inclusive permit shall be assigned the permit number of the most recently issued permit being consolidated.

DEP response - The term "all-inclusive" is added to this paragraph.

3.7.b. The anniversary date of the most recently issued permit being consolidated shall become ~~used as~~ the new date for permit renewal and for submission of the annual progress report map.

DEP response - DEP agrees.

3.8. Special Land Use.

3.8.a. With the approval of the landowner, the director may authorize the retention of drainage structures, roads, buildings or other structures after final bond release.

3.8.b. With the approval of the landowner, the director may authorize the export of backfill material ~~off~~ from the permitted area. ~~for beneficial purposes, or may authorize other beneficial uses of the operation, which are reasonable.~~ Time limits shall be established for the completion of these special land uses. Drainage control may be required to minimize pollution during any special land use period.

DEP response - Section 18(e) states that backfill may be exported off the permitted area only for beneficial use.

§38-3-4. Bond and Bond Pooling Fund.

4.1. Operators who have operated for less than five (5) years under West Virginia mining laws shall post a performance bond for each acre previously disturbed and each acre proposed to be disturbed during the next ensuing year. The operator shall provide an estimate of the reclamation liability for the permit area based upon the proposed quarrying and reclamation plan. Documentation shall be provided to ensure that the bond provided is equal to or greater than the reclamation liability. For the purpose of this section, disturbed acres do not include reclaimed areas that meet the release requirements of section 17 of these rules. The minimum bond for each permit is ten thousand dollars ($10,000).

4.2. Operators or persons who have operated for five (5) or more years under West Virginia mining laws without a serious violation shall contribute to the bond pooling fund. For each permit, permittees contributing to the fund shall make an initial payment of fifty dollars ($50) for each acre currently disturbed. For each acre estimated to be newly disturbed during the next ensuing year, the payment shall be fifty dollars ($50). Thereafter, the permittee shall make an annual payment of twelve dollars and fifty cents ($12.50) for each disturbed acre until the permittee has paid into the fund a total of one thousand dollars ($1,000) for each disturbed acre.

§38-3-5. Haulageways and Transportation Facilities.

5.1. General. -- Each permittee shall design, construct, utilize, and maintain roads, railroad loops, spurs, sidings, surface conveyor systems, chutes, aerial tram ways and other transportation facilities to meet the requirements of this rule and to control or minimize; erosion, siltation, dust production, air pollution, water pollution, and to prevent damage to public or private property.

DEP response - The original language requires that air pollution be controlled or minimized. Dust is a form of air pollution. Section 5.17 of this rule requires that reasonable means be employed to prevent loss of haulageway surface material in the form of dust.

5.2. Plans. -- Typical ~~sections~~ drawings detailing ~~showing width of~~ road design, width of cut, fill slopes, surface materials ~~of the road~~, and center line profiles shall be submitted. ~~with~~ The drawings shall include road grades. E&S controls, sumps, culvert pipe size and locations ~~and size~~, and other transportation facilities such as truck washes, scales etc. shall be ~~included~~ located on the maps in the permit application. The design of haulageways shall be certified by a qualified registered professional engineer, licensed land surveyor, or approved person as being in accordance with specifications of this rule.

DEP response - The requirement for drainage control is to be included in this paragraph. The other recommended changes are already made a part of a permit.

5.3. Location marking. -- The location of the proposed haulageway or other transportation facility shall be identified on the site by visible markings on one hundred foot (100') centers at the time the quarrying and reclamation plan is pre-inspected, and prior to commencement of construction. Existing roads are exempt from this requirement.

DEP response - The word "marking" is added.

5.4. Grading. -- The grading of a haulageway shall be such that:

5.4.a. No sustained grade over 300 feet long shall exceed ten percent (10%);

DEP response - The established steepness of grade is fifteen percent (15%) in any three hundred foot (300ft) segment. (see section 5.4.b of this Rule)

5.4.b. The maximum grade of any road may be as steep as fifteen percent (15%) in any three hundred foot (300') segment, but shall not exceed fifteen percent (15%) anywhere within that three hundred foot (300') segment;

DEP response - Intermittent roads are exempt from certain performance standards.

5.4.c. There shall not be more than three hundred feet (300') of maximum grade for each one thousand feet (1,000') of road constructed;

5.4.d. The road surface shall be sloped toward the E&S collection ditch line that accompanies each road at the minimum rate of one-half inch (1/2") per foot of surface width, or crowned at the minimum rate of one-half inch (1/2") per foot of surface width, as measured from the center line of the haulageway; ~~and~~

DEP response - The requirement for ditchlines in in section 5.6 of these Rules.

5.4.e. The grade on switchback curves shall be reduced to less than the approach grade and shall not be greater than ten percent (10%).

5.5. Cut Slopes. -- Cut slopes shall not be more than 1:1 in soils or 1/4:1 in rock.

5.6. Ditches. -- A E&S collection ditch shall be provided on both sides of any through-cut and on the inside shoulder of a cut-fill section, with ditch relief cross-drains being spaced according to grade. Water shall be intercepted before reaching any switchback or large fill area and ~~led off~~ properly controlled to minimize erosion or sedimentation. Water on a fill or switchback shall be captured and released below the fill via an approved E&S control structure, not over it. Ditch lines shall be designed to ~~pass~~ adequately handle a one-year, twenty-four hour precipitation event.
(storm event)

DEP response - DEP feels that the existing language is clear in the requirement for ditchline construction.

5.7. Culverts. -- Ditch relief culverts shall be installed according to the following provisions:

5.7.a.	Road Grade in Percent	Minimum Spacing between Culverts in Feet

0 - 5	300 - 800
6 - 10	200 - 300
11 - 15	100 - 200

DEP response - DEP agrees.

5.7.b. ~~The~~ Culvert shall cross the haulageway at a thirty degree (30º) angle or at an angle approved by the inspector . ~~downgrade at~~ A minimum slope of three percent (3%) from entry to exit is required;

DEP response - DEP agrees.

5.7.c. The inlet end of each culvert shall be protected by a headwall of suitable material, and the outlet end shall be placed below the toe of any fill ~~with an apron of suitable material provided for the outflow to spill on; and~~ Outflows of any culvert shall be constructed of rock or other durable material and shall be designed to reduce velocity of the outflow and minimize erosion

DEP response - The existing language is sufficient in that it requires an apron of suitable material for the outflow to spill on.

5.7.d. The culvert shall be covered by compacted fill to depth of one foot (1') or half the culvert diameter, whichever is greater.

5.8. Culvert Openings. -- Culvert openings installed on haulageways should not be less than one hundred thirteen square inches (113") (a 6in pipe)in area, but, in any event, all culvert openings shall be adequate to carry storm run off from the peak flow of a one (1)-year twenty-four (24) hour precipitation event and shall receive necessary maintenance to function properly at all times.

DEP response - The requirement that all culvert openings be adequate to carry storm run off from the peak flow of a one (1) year, twenty four (24) hour storm is adequate. Some pipes may not need to exceed 100 square inches to meet that requirement.

5.9. Natural Drainway. -- Minor alterations and relocations of natural drainageways as shown on the quarrying and reclamation plan shall be permitted with appropriate required permits if the natural drainageway will not be ~~blocked~~ obstructed, and if no damage is done to ~~the natural drainway or~~ to adjoining landowners or un-permitted lands.

Rocky; as stated you give the company the right to change blue line streams that are covered by tri-party permits and require Corps approval

DEP response - This pertains only to minor alterations and does not exempt them from the requirement to get all necessary permits.

5.10.Stream Crossings. -- Drainage structures, such as bridges, culverts, low-water crossings, or other structures designed, constructed and maintained using current prudent engineering practices, shall be required in order to cross an intermittent or perennial stream channel. They shall be constructed ~~such~~ so as not to affect the flow of the stream or cause an increase in sediment load during construction or use. Consideration shall be given to the time of year when a stream is crossed or when construction activities shall take place and length of time the stream channel is to be affected ~~used~~, but in no event, and under no condition shall the flow of the stream be adversely affected or the sediment load of the stream increased during construction and/or use. During construction the company shall be required to install appropriate sediment control structures to minimize release of sediment-laden water from the work area. These structures shall be capable of passing the peak flow for a ten (10)-year twenty-four (24) hour precipitation event from the contributing watershed.

DEP response - DEP feels that the existing language is clear in protecting the stream from adverse affects and increased sediment load.

5.11. Removal of Drainage Structures. -- No bridges, culverts, stream crossing, etc., necessary to provide access to the operation, may be removed until reclamation is completed and approved by the director. The same precautions as to water quality are to be taken during removal of drainage structures as those taken during construction and use.

5.11.Stabilization of Slopes. -- All fill and cut slopes shall be stabilized and vegetated after the construction of a haulageway.

DEP response - Outslopes of some roads are stabilized using rip rap rock or other mechanical means. The definition of stabilized includes the option of vegetation.

5.12.Haulageway Surfacing. -- Access roads, haul roads, processing areas, yards storage areas, plant sites, and parking areas shall be maintained with proper surface materials to prevent erosion. The material used to surface the haulageway shall be

sufficiently durable for the anticipated volume of traffic, and the weight and speed of the vehicles using the road. Haulageways shall not be surfaced with any acid-producing or toxic material, or with any material which will produce a concentration of suspended solids in surface drainage. Water leaving these areas shall be collected and channeled to sediment control facilities.

DEP response - DEP agrees.

5.14. Tolerance. -- All grades referred to in this section shall be subject to a tolerance of two percent (2%) grade. All linear measurements referred to in this section shall be subject to a tolerance of ten percent (10%) of measurement. All angles referred to in this section shall be measured from the horizontal and shall be subject to a tolerance of five percent (5%).

5.15. Mud and Debris on Public Roads. -- The deposition of mud and debris on public roads shall be minimized to the extent possible in order to prevent public nuisance.

5.16. Water Bars. -- Water bars of the ditch and earth berm or log type shall be installed according to the following table of spacing in terms of percent of road grade prior to the abandonment of a haulageway or infrequently used road. Spacing of water bars in Feet:

Percent of Haulageway	Spacing of Water Bars in Feet
2	250
5	135
10	80
15	60
20	45
Above 20	25

5.17.Dust Control. -- Reasonable means shall be employed to prevent the generation of fugitive dust ~~loss of haulageway surface material in the form of dust.~~ from road surfaces, trucks, equipment and transported products. Road watering, chemical treatments and truck washers shall be employed as required to control fugitive dust.

DEP response - Dust from equipment or transported material is not regulated by Article 4. Road watering, chemical treatments and truck washes is included as suggestions for controlling dust.

5.18. Abandonment of Haulageway. -- Upon abandonment of a haulageway, the haulageway shall be seeded and every effort made to prevent erosion by means of culverts, water bars or other devices.

5.19 Infrequently Used Access Roads. -- Infrequently used access roads are exempt from subsection 5.4 of this rule. However appropriate E&S controls must be installed to prevent the escape of sediment or contaminated water into the surface or ground water system from these roads.

DEP response - Infrequently used access roads are not exempt from erosion control.

5.20. Certification. -- Upon completion of construction or reconstruction, all primary roads for which design criteria were approved as part of the permit shall be certified. Such certification shall affirm that construction was completed in accordance with the approved criteria, except as otherwise noted in the certification statement. Where the certification statement indicates a change from the design standards or construction requirements approved in the permit, such changes shall be documented in as-built plans. If as-built plans are submitted, the certification shall describe how and to what extent the construction deviates from the proposed design, and shall explain how and certify that the road shall meet rule standards. The certification shall be on forms approved by the director and signed by a qualified registered professional engineer, licensed land surveyor or approved person with experience in design and construction of roads. All roads used for transportation of mineral or spoil, and which are constructed outside the mineral extraction area, shall be certified before they are used for such transportation.

§38-3-6. Blasting.

6.1. Requirements. -- Each operator shall comply with all applicable state and federal laws ~~in~~ relating to the transportation ,storage and the use of explosives. The director is responsible for the training of , examination of, and certification of persons engaging. in or directly responsible for blasting or use of explosives in quarrying operations. A blaster certified by the director shall be responsible for all blasting operations including the transportation, storage and use of explosives within the permit area in accordance with the blasting plan.

DEP response - DEP agrees.

6.2. Blasting Plan. -- Each application for a permit, where blasting is anticipated, shall include a blasting plan. The blasting plan shall explain how the applicant shall comply with the blasting requirements of WV Code §22-4, this rule, and the terms

and conditions of the permit. This plan shall include, at a minimum, information setting forth the limitations the operator shall meet with regard to ground vibration and airblast, the basis for those limitations, and the methods to be applied in controlling the adverse effects of blasting operations. The blasting plan shall include information on the closest structures, typical blast designs, material storage and handling and an anticipated frequency rate or time of all blasting.

DEP response - Identification of nearest protected structures, direction and distance is required in Section 6.4.b.4. of these Rules. Typical blast design is required in Section 13 (a) (4) of the Act. DEP does not regulate the storage and handling of explosives. Section 6.3.c. of these Rules requires that residents and owners of protected structures adjacent to any part of the proposed operation be notified of the general schedule of blasts.

6.3. Written Notification. -- At least thirty (30) days prior to mining operations, written notification of blasting operations which detonate five (5) pounds or more of explosives at any given time, shall be delivered in person or by certified mail to all residents, owners of protected structures, and other persons who are within one-half (1/2) mile of any part of the blasting area. A written receipt of delivery or the United States Postal Service certified receipt of notification shall be maintained with the blasting log. The notification shall contain at a minimum:

6.3.a. Name, address, and telephone number of the operator; and an emergency contact phone number.

DEP response - DEP agrees.

6.3.b. Identification of the specific areas in which blasting shall take place;

6.3.c. A general schedule when explosives are to be detonated;

6.3.d. Methods to be used to control access to the blasting area; and

6.3.e. Types and patterns of audible warning, and all clear signals to be used before and after blasting.

6.4. Blast Record.

6.4.a. A blasting log book formatted in a manner prescribed by the director shall be kept current daily and made

available at the permit site for inspection by the director, or upon written request, by the public.

6.4.b. The blasting log shall, in addition to the information required in WV Code §22-4-13(a)(5), contain the following information:

6.4.b.1. Name of permittee, operator, or other person conducting the blast;

6.4.b.2. Location of blast on a grid map;

6.4.b.3. Name and certification number of blaster-in-charge;

6.4.b.4. Identification of nearest protected structure not owned or leased by the operator and direction and distance, in feet, to such structure;

6.4.b.5. Type of material blasted;

6.4.b.6. Burden and spacing of each shot pattern;

6.4.b.7. Diameter and depth of holes;

6.4.b.8. Types of explosives used;

6.4.b.9. Weight of explosives used per hole;

6.4.b.10. Total weight of explosives used;

6.4.b.11. Maximum weight of explosives detonated within any eight (8) millisecond period;

6.4.b.12. Method of firing and type of circuit;

6.4.b.13. Type and length of stemming;

6.4.b.14. If mats or other protections were used;

6.4.b.15. Type of delay detonator used and delay periods used;

6.4.b.16. Seismograph records and air blast records shall include but not be limited to:

6.4.b.16.A. Seismograph and air blast reading, including a map or description of the exact location, date, and time of reading and its distance from the blast;

DEP response - Section 6.4.b.2.requires that the location of the blast area be indicated on the blast log.

6.4.b.16.B. Name of person and firm taking the readings;

6.4.b.16.C. Name of person and firm analyzing the record, where analysis is necessary; and

6.4.b.16.D. Type of instrument, serial number sensitivity and calibration signal, and certification of annual calibration;

DEP response - DEP agrees.

6.4.b.17. Sketch of delay pattern to include the entire blast pattern and all decks; and

6.4.b.18. Reasons and conditions for unscheduled blasts.

6.4.b.19 Weather conditions at the time of the blast including; temperature, wind direction, and atmospheric condition

DEP response - Section 13 (a) (5) of the Act requires that weather conditions be documented in the blasting log.

6.4.b.20 The time of the blast.

DEP response - Section 13 (a) (5) of the Act requires that the time of the blast be documented in the blasting log.

6.5. Blasting Procedures.

6.5.a. All blasting shall be conducted during daytime hours, between sunrise and sunset; provided, that the director may specify more restrictive time periods based on public requests or other consideration, including the proximity to residential areas. No blasting shall be conducted on Sunday. Provided, however, the director may grant approval of a request for Sunday blasting if the operator demonstrates to the satisfaction of the director that the blasting is necessary and there has been an opportunity for a public hearing. Blasting shall not be conducted at times different from those announced in the blasting schedule except in emergency situations where rain, lightning or other atmospheric conditions, or operator or public safety requires unscheduled detonations. Blasting shall be conducted in such a way so as to: prevent injury

to persons, damage to public or private property outside the permit area, to minimizes releases of fugitive dust, to minimize adverse impacts on any underground mine or cave, and cause change in any water course channel, or alter the availability of surface or groundwater resources outside the permit area.

DEP response - The requirement to prevent damage to property outside the permit area includes damage from dust. The existing language in the Rule protects against "change in the course channel, or availability of surface or groundwater outside the permit area'. Section 16 of the Act provides for water rights replacement.

6.5.b. Safety Precautions.

6.5.b.1. Three (3) minutes prior to blasting, a warning signal audible to a range of one-half (1/2) mile from the blast site shall be given. This preblast warning shall consist of three (3) short warning signals of five (5) seconds duration with five (5) seconds between each signal. One (1) long warning signal of twenty (20) seconds duration shall be the "all clear" signal. Each person in the permit area, and each person who resides or regularly works within one-half (1/2) mile of the permit area, shall be notified of the meaning of these signals;

6.5.b.2. All approaches to the blast area shall be ~~guarded~~ protected against unauthorized entry prior to and immediately after blasting;

DEP response - DEP agrees.

6.5.b.3. All charged holes shall be guarded and posted against unauthorized entry; and should a shot be delayed no charged holes may be left unattended until fired.

DEP response - DEP agrees.

6.5.b.4. Flyrock, including blasted material, shall not be cast from the blasting site more than half way to the nearest protected structure and in no case beyond the bounds of the permit area.

6.5.c. At the request of the director, the operator shall monitor air blast levels using an instrument with an upper-end, flat-frequency response of at least 200 Hz.

deemed necessary for the protection of public or private property, or the general welfare and safety of the public.

6.5.j All personnel working at an operation conducting blasting shall undergo blasting safety training prior to beginning work at the site and once yearly thereafter.

DEP response - DEP does not currently train or certify blasters on quarry operations. This issue was the subject of considerable debate while negotiating the language of the Act and it was agreed that, at this time, the Office of Explosives and Blasting would not have jurisdiction over quarries. The state's Fire Marshall's office is responsible for licensing blasters. Section 6.8 of this Rule requires that "Each person responsible for blasting operations be familiar with the blasting plan and blasting-related-performance standards for the operation…"

6.6. Preblast Survey.

6.6.a. The director shall review each pre-blast survey as to form and completeness only, and shall notify the operator of any deficiencies within fifteen (15) days.

6.6.b. Requirements for a preblast survey shall include the following:

6.6.b.1. Surveys shall be conducted and accepted by the director before the planned initiation of blasting operations;

6.6.b.2. If a structure within the requisite area is added to or renovated subsequent to a preblast survey, a survey of such additions and/or renovation shall be performed upon written request of the resident or owner, and such survey must be performed within thirty (30) days of notification of the request;

6.6.b.3. Copies of the report shall be provided to the person requesting the survey and to the director;

6.6.b.4. Any person who receives a survey and who disagrees with the results of the survey, may submit a detailed description of the specific areas of disagreement.

6.7. Blasting Prohibited. -- The director or his authorized agent may prohibit blasting in specific areas where it is deemed necessary for the general safety of the area.

6.8. Certified Blasting Personnel. -- Each person responsible for blasting operations shall be certified by the director. Each

certified blaster shall have proof of certification either on their person or on file at the permit area during blasting operations. Certified blasters shall be familiar with the blasting plan and blasting-related-performance standards for the operation at which they are working.

6.9. Assessment. -- Any assessment as set forth in WV Code §22-4-13 or §22-4-24 shall be assessed by the Division of Environmental Protection (DEP) designated assessment officer and shall be paid within ten (10) days after receipt of said assessment notice.

§38-3-7. Drainage System.

7.1. Drainage Plan. -- There shall be submitted with the application for a quarry permit a drainage plan which shows the proposed method of drainage control on and away from the area of land to be disturbed. Said plan shall indicate the location of all sediment control structures, diversion ditches, collection ditches and the location of all water test sites. The plan shall include a description of water treatment facilities, sediment control facilities and all other data as may be required.

DEP response - Diversion ditches, collection ditches are sediment control structures that are shown on the drainage plan.

7.2. Natural Drainways. -- Natural drainways in the area of land disturbed by quarrying operations shall be kept free of overburden except where overburden placement has been approved. Such drainways shall be identified on the maps submitted with the application. Overburden placement and haulageways across natural drainways shall be constructed so as not to materially increase the sediment load in the stream.

7.3. Constructed Drainways.

7.3.a. Ditch Above Highwall. -- All surface water which drains into the pit shall be effectively intercepted on the uphill side of the highwall by suitable and adequate diversion ditches, and conveyed by engineered channels or other suitable means of discharge to natural drainways outside the disturbed area. The director may, in the exercise of his or her sound discretion, when not in conflict with WV Code •22-4, as amended, waive this rule. When this rule is waved sediment control facilities shall be enlarged to accommodate any water entering the disturbed area from above the Highwall.

DEP response - The drainage control system must be designed according to the Technical Handbook which includes design criteria for diversion ditches. The sediment control structures are designed to safely pass drainage from storm events from the component drainage area.

7.3.b. Ditch on Bench. -- Drainage ditches shall be constructed on the excavated solid bench in order to carry off storm, surface or seepage water. The discharge or "breaking" point for ditches on the bench shall fall at or near the midpoint between natural or constructed drainways. In no case shall water be discharged over an unprotected spoil slope or across unprotected disturbed area. Removal of water from the bench shall be accomplished by use of adequate pipe, a rock riprap flume, asphalt or concrete chutes, or by grading a channel to non-erosive rock.

DEP response - The "discharge" is different from the "breaking point". The language "or across unprotected disturbed area" is added.

7.3.c. Ditch Below Spoil Slope. -- All surface water draining off the disturbed area shall be intercepted by suitable and adequate ~~diversion~~ collection ditches which will carry the water to suitable drainage control structures before discharge into a natural drainway. These ditches shall be located within twenty-five feet (25') of the out slope toe of the anticipated disturbance area. If at any time spoil material interferes with the flow of water in these ditches, that material shall be cleaned out immediately. The director may, in the exercise of his sound discretion, when not in conflict with WV Code •22-4, as amended, waive this rule.

DEP response - Diversion ditches are "collection ditches". DEP prefers to retain existing language because it is more inclusive.

7.4. Sediment.

7.4.a. Sediment Control. -- Drainage control structures shall be constructed in appropriate locations in order to control sedimentation. All such structures shall have a minimum water storage capacity ~~to store~~ of.125 acre-ft./acre of disturbed area in the watershed. This disturbed area shall include all land affected by previous operations that is not presently stabilized, and all land that will be affected within the component drainage area. Design criteria and construction specifications for embankment type sediment dams, excavated ponds, other water retarding structures and drainage control structures will be found in the Technical Handbook. If a waiver is received for the

placement of a diversion ditch above the highwall then the drainage control structure shall be designed with a capacity able to hold and control the total runoff from the disturbed area and the area draining into the pit from above the highwall.

DEP response - The sediment control structures are designed to safely pass drainage from storm events from the component drainage area.

7.4.b. The director may consider approving a reduced storage factor for sediment control structures where the applicant has demonstrated a reasonable likelihood, and the director finds that effluent limitations will be met by other means.

DEP response - Effluent limits may not necessarily have to be met by "other means". The nature of the overburden or mineral being mined as well as the mining technique may, by themselves, preclude the need for extensive sediment control structures. This will be judged by the agency on a site-specific basis and effluent standards shall still have to be met.

7.4.c All sediment control structures shall be cleaned ~~out~~ to the original designed storage capacity when the sediment accumulation reaches sixty percent (60%) of design capacity.

DEP response - DEP agrees.

7.5. Drainage

7.5.a. Drainage Certification. -- Prior to disturbance in a component drainage area, the operator shall complete and certify the drainage and sediment control system in accordance with the approved permit. The certification shall be on forms approved by the director and signed by a qualified registered professional engineer, licensed land surveyor or an approved person.

7.5.b. As-Built Plans. -- Any deviations from the approved plan which result from unforeseen site specific circumstances arising during construction, shall be reflected in as-built plans submitted by the operator, and approved by the director immediately following construction. The as-built plans shall include the following:

7.5.b.1. The original design;

7.5.b.2. The extent of the changes; and

7.5.b.3. The reference points. If as-built plans are submitted, the certification shall

7.5.b.3.A. Describe how and to what extent the construction deviates from the proposed design; and

7.5.b.3.B. Explain how and certify that the drainage structure will meet the provisions of this rule.

7.6. Water Quality Control.

7.6.a. All reasonable measures shall be taken to intercept all undisturbed surface water, and to prevent surface water from entering the pit area by the use of the following:

DEP response - DEP disagrees. Adding the word "and" changes the meaning and intent of the Rule. The intent is to intercept surface water to prevent it from entering the pit.

7.6.a.1. Diversion ditches;

7.6.a.2. Culverts and drainage ditches; or

7.6.a.3. Other methods.

7.6.b. All water accumulation into the pit shall be removed as rapidly as possible unless in-pit sediment control is being utilized or permanent water impoundments are approved.

7.6.b.1 In- pit sediment control may only be used when it can be demonstrated that no sediment-laden water is escaping from the pit in an untreated state via caves, fractures or other natural water conveyances.

DEP response - DEP has added language to read "Pits may be used for temporary or permanent water storage and sediment control; provided however, that the pit storage does not contribute to water contamination as demonstrated by surface and ground water monitoring".

7.6.c. All water discharges from the permit area are to be monitored in accordance with the approved National Pollutant Discharge Elimination System (NPDES) permit issued to the operator and a written record of the testing dates and analytical data shall be kept current and made available for inspection. A compilation of the foregoing information shall be submitted to the director in accordance with the approved permit.

7.6.d. Any treatment ~~works~~ necessary to meet effluent limitations shall be approved by the director. Discharge from the permit area shall not in any case violate federal or state water quality standards or effluent limitations.

7.6.e. The monitoring frequency shall be governed by the standards set forth in the National Pollutant Discharge Elimination System program under the federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et. seq., and the rules and regulations promulgated thereunder or by special conditions of the permit.

DEP response - This issue is regulated by Article 11.

7.6.f. Water tests shall be taken before quarrying operations begin, and the results of these tests shall be shown in the permit application. These tests shall include flow rate, total suspended solids, total dissolved solids, specific conductance, pH, turbidity, acidity, alkalinity, sulfates, total iron, total manganese and aluminum and any other constituents required by the director.

DEP response - The parameters to be tested are regulated by Section 3.5 of these Rules.

The location for these preliminary tests shall be located :

DEP response - Adding the word "located" would be redundant.

7.6.f.1. On natural drainways above proposed quarrying operation;

7.6.f.2. On natural drainways below proposed quarrying operations at or near the affected drainage area boundary; and

7.6.f.3. On natural drainways upstream and downstream from the mouth of a natural drainway affected by quarrying.

7.6.f.4 on any spring that might be hydrologicaly linked to the permit area.

DEP response - The pre-quarry water assessment requires monitoring of surface and groundwater sites established on the permit area and adjacent areas. This will be determined on a site-specific basis from base line information from sampling and analysis. Sampling <u>any</u> spring that <u>might</u> be hydrologically linked would be costly and

not as effective. Section 14 of the Act requires tests for both quantity and quality of surrounding groundwaters.

7.7. Seeding of Drainage System. -- All areas disturbed in the installation of the drainage system shall be seeded and mulched after construction in accordance with section ten (10) of this rule.

§38-3-8.

8.1. Operator Responsibility. -- In planning and executing quarrying operations, the operator shall have, at all times, proper regard for all requirements imposed by WV Code •22-4, as amended, all rules adopted pursuant thereto, and all provisions of the approved permit.

8.2. Topsoiling or Other Material Suitable for the Post Mining Land Use. - Topsoil or other suitable material shall be removed in a separate layer and distributed over the backfilled or disturbed area, or if not utilized immediately, segregated and stockpiled in a separate location as specified in the permit. Topsoil not immediately utilized shall be protected from wind and water erosion and properly marked .

DEP response - It is not necessary to mark topsoil since it is easily recognized. The Quarrying and Reclamation Plan requires a description of the manner in which topsoil is to be conserved and used in reclamation.

8.2.a. Any material used for topsoiling must be capable of supporting and maintaining the approved post quarrying land use. This determination of capability shall be based on the results of appropriate chemical and physical analyses of overburden and topsoil. A certification of analysis shall be made by a qualified laboratory stating that the substitute shall support and sustain vegetation for release of the permit. These analyses shall include at a minimum:

8.2.a.1. Depth;

8.2.a.2. Thickness;

8.2.a.3. Aerial extent of the substitute structure or soil horizon;

8.2.a.4. pH;

8.2.a.5. Texture class; and

the approved post-quarrying land use or may result in additional erosion and sedimentation.

8.8. Inactive Status. -- Inactive operation status shall be considered for a specified period providing:

8.8.a. disturbed areas are stabilized;

8.8.b. drainage control is maintained, and

8.8.c. prior written approval is obtained from the director.

8.8.d. The operator shall notify the director prior to reactivating the operations.

8.9. Keeping Operation Current. -- Grading, backfilling and water management practices shall be in accordance with the approved quarrying and reclamation plan. Should the particular site conditions or weather make adherence to these guidelines impractical, the director may reasonably extend the time or distance requirements of the plan.

8.10. Off-Site Protection. -- Spoil material may be placed outside the permit area, if approved by the director after a finding that said placement will provide benefits to the environment, future land use or the health, safety or welfare of the public will result. In this case proper E&S controls must be in place and maintained at the receiving site.

DEP response - The following is added: "Drainage control may be required to minimize pollution". This agrees with Section 3.8 of these Rules.

8.11. Water Impoundments. -- Prior to the construction of an impounding area for the storage of water after quarrying, approval must be obtained from the director for such impoundment. This plan shall include, but not be limited to the following:

8.11.a. Location of the impounding area;

8.11.b. Dimensions of the area as to capacity and depth (average, maximum and minimum);

8.11.c. Plot plan of impoundment area;

8.11.d. Source of water entering the impoundment;

8.11.e. Quality of the water entering the impoundment;

8.11.f. Quality of water leaving the impoundment and mechanism of discharge;

8.11.g. Mineral or seams quarried or involved with impoundment;

8.11.h. Chemical characteristics of the soils and underlying strata in the impoundment area as they relate to acid production;

8.11.i. Safety aspects considered such as spillway overflow, emergency spillway, access to area; and

8.11.j. Consent of the landowner for such impoundment with submission on specified forms.

8.12. Backfilling and Regrading. -- All disturbed areas are to be backfilled and regraded in accordance with the permit. Land above the highwall shall not be disturbed unless the director finds that the disturbance will benefit the future land use of this site or facilitate compliance with the requirements of this section.

8.13. Stabilization. -- The material used to backfill, reduce, or eliminate the highwall shall be sufficiently compacted or otherwise mechanically stabilized so as to ensure stability of the backfill. Woody materials may be buried in the mineral extraction area only when the burial does not cause or add to water pollution or instability.

§38-3-9. Excess Spoil Disposal, Temporary Spoil Storage Areas.

9.1. Disposal of Excess Spoil in Side of Hill Fills. -- Excess spoil or material to be placed in permanent disposal sites shall be transported to and placed in a controlled manner in disposal areas other than the mine workings or excavation area only if all the provisions of this section are met.

DEP response - DEP agrees.

9.1.a. Location of Disposal Sites. - Permanent excess spoil disposal areas shall be identified on the proposal map, shall be located within the permit area, and they must be approved by the director as suitable for construction of fills. The disposal area shall be located on the most moderate slopes and naturally stable areas available and shall not encroach on perennial or intermittent streams.

10.4. The permittee shall protect all vegetated areas from excessive grazing.

§38-3-11. Mapping, Approved Persons, and Markers.

11.1 Scale for Maps. -- The scale required for all maps and plans prepared for submission with an application for a quarrying permit shall be as follows:

11.1.a. A U.S. geological survey topographic seven point five (7.5) minute topographic quadrangle map shall be enlarged to five hundred feet (500') or less to the inch;

DEP response - DEP disagrees. The existing language is adequate.

11.1.b. Scale on aerial photographs shall be six hundred sixty feet (660') or less to the inch.

DEP response - DEP agrees.

11.1.c. Written approval from the director shall be required prior to the submission of maps drawn to any scale other than those set forth by this rule.

DEP response - DEP agrees.

11.2. Scale for Progress, Modification, Annual Progress Report and Final Maps. -- The scale required for progress, modification, Annual Progress Report and final maps shall be the same scale as the proposal and drainage map.

11.3.Location Map Insert - All permit submittal maps shall contain an insert location map ~~with~~ displaying a clear and accurate location ~~map~~ of the proposed quarry. This map shall be of a scale and detail similar to that found on ~~the~~ West Virginia county highway maps.

DEP response - DEP agrees to insert the language "…similar to that" found "on" West Virginia county highway map"s".

11.4. Map Size. -- All maps and plans shall be submitted on standard print paper, twenty-four inches (24") by thirty-six inches (36") or less. If supplementary maps or plans are attached, match lines shall be used.

11.5. Color Code. -- A color code shall be used in preparing all maps to indicate critical features of the permit area as

follows; provided, that drafted or computer generated graphic symbols or shading may be used in place of a color code, if a separate, uniquely identifiable, and clearly discernible symbol or shading is provided in place of each color as specified below, and if the symbols or shading are clearly defined on map legends and used consistently throughout the permit application, and in any subsequent permit modifications, progress maps, or other submittals relating to the permit:

11.5.a. Red shall indicate the mineral ~~to be removed~~; removal area

DEP response - DEP agrees.

11.5.b. Yellow shall indicate ~~the total~~ disturbed land not included in the current mineral removal area;

DEP response - DEP agrees.

11.5.c. Blue shall indicate water and drainage;

11.5.d. Brown shall indicate special uses;

11.5.e. Green shall indicate reclaimed areas;

11.5.f. Purple shall be used to outline adjacent mining permits.

INSERT HERE A DESCRIPTION OF WHAT IS REQUIRED ON VARIOUS PERMIT MAPS AND WHAT MAPS ARE REQUIRED

DEP response - This is too much detailed information to include in these Rules. The information required for renewal, progress, permit and modification maps is described by the Act, these Rules and by policy.

11.6. A Permit map shall be submitted at a scale of 1"equals 500' that contains all the information required under 22-4-5

DEP response - The scale of maps and photos is described in Section 11.1 of these Rules.

11.7 Approved Person. -- Any person preparing an annual progress report map or certifying the construction of drainage control structures, haulageways, or preparing a reclamation and

Office of Mining and Reclamation
10 McJunkin Road
Nitro, WV 25143
304-759-0510
304-759-0528

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

August 28, 2000

Mr. Barry Lay
Waco Oil and Gas Company, Inc.
Post Office Box 397
Glenville, West Virginia 26351

Dear Mr. Lay:

Thank you very much for submitting comments on the proposed quarry rules. Attached please find DEP's responses to your comments. Those comments which were accepted by DEP have been included in the latest draft being filed with the Secretary of State's Office.

If you have any questions, please feel free to contact me.

Sincerely,

Harold M. Parsons, Jr.
Program Administrator

HMP:sh
Attachment

3.1.c. Readvertisement. -- After an application has been advertised in accordance with WV Code §22-4-6(b) and is determined by the director to have had a limited number of minor changes that do not significantly affect the health, safety or welfare of the public, the method of operation, the quarrying and reclamation plan, or the original advertisement, he or she may require one (1) additional advertisement to be published with a ten (10) day public comment period. Changes to the permit application which do significantly affect the health, safety or welfare of the public, the method of operation, the quarrying and reclamation plan or the original publication shall require a full advertisement in accordance with WV Code §22-4-6(b).

Do not agree with this section dealing with readvertisement.

DEP response - The intent of this section is to allow public review and comment on any minor changes to the application without requiring a full, three time, thirty day readvertisement. DEP has only thirty days to review an application for a permit.

3.1.d. Renotification. -- A renotification letter shall be sent to all commentors of a quarrying application when a determination has been made by the Director that full readvertisement is required.

3.2. QMA File Number. -- Prior to the publication of an advertisement for a quarrying permit in accordance with WV Code §22-4-6(b), the applicant shall submit a complete quarrying permit application and obtain a quarry mining application (QMA) file number. Each QMA number shall be valid for one year; provided, that the director may extend a QMA number beyond one year, if the applicant has diligently pursued the application. In order for a QMA number to be extended, the applicant must submit to the director a written request, which shall state the reason(s) and which shall demonstrate good cause for the extension.

3.3. Fees. -- The one thousand-dollar ($1,000) permit application fee shall be paid prior to the issuance of the QMA number. The one thousand-dollar ($1,000) fee for the original permit shall be paid prior to the issuance of the permit.

3.4. Fish and Wildlife Resources Information.

3.4.a. Each new permit application and major modification shall include fish and wildlife resource information for the permit area and adjacent area. The scope and level of detail for such information shall be determined by the director in consultation with state and federal agencies with responsibilities for fish and wildlife resources.

The statement "If the director and the state and federal agencies determine that the operation will not adversely impact the fish and wildlife resources, no further assessment is required" should be added.

DEP response - DEP agrees. The language is included in this section of the Rule.

3.4.b. Endangered Species. -- When the proposed quarrying operation will affect known threatened or endangered species of plants or animals or their critical habitats, the application shall describe control measures, management techniques, and monitoring methods to be employed in order to protect or enhance such species and habitats. Endangered or threatened species are as listed by the Secretary of Interior under the Endangered Species Act of 1973 (16 U.S.C. 1521 et seq.).

3.4.c. Notice to Governmental Agencies. -- Upon receipt of an application for a quarrying permit, the director shall notify all federal or state government agencies with authority to issue permits and licenses applicable to the proposed quarrying operation including, as appropriate, the local U. S. Army Corps of Engineers District Engineer, state and federal fish and wildlife agencies, and the State Historic Preservation Officer.

3.4.d. Effect on Historic Places and Archaeological Sites. -- Where the proposed quarrying operation will adversely affect any publicly owned park, any place listed on the national register of historic places or archaeological sites, the director shall transmit to the federal, state or local agencies with jurisdiction over the park or historic place the applicable parts of the permit application, together with a request for the agency's approval or disapproval of the operation. Consideration and coordination of the permit review shall be in accordance with the National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.) and the Archaeological Resource Protection Act of 1979 (16 U.S.C. 470 et seq.). A permit for such operation shall have joint approval of all affected agencies. Failure of the agency to respond to the director's request within a prescribed time period shall constitute approval.

3.5. Pre-quarrying Water Assessment.

3.5.a. Each new application for a quarrying permit shall contain a pre-quarrying water assessment. The assessment shall be based on base line information developed from sampling and analysis of surface and groundwater at monitoring sites established on the permit area and adjacent areas. The pre-quarrying water assessment shall at a minimum include the following information:

Readily available seeps and springs should be used to define surface and groundwater resources. In the absence of these seeps and springs, the operator may be required to drill not more than one well per five acres of disturbed area.

DEP response - Section 14 of the Act provides for groundwater test sites above and below gradient of the proposed quarry. Test wells, seeps and springs may be utilized as is appropriate. DEP feels that a water assessment should be site specific and that preference be given to monitoring seeps and springs when defining the groundwater resources. Wells may or may not intercept the groundwater flow path. DEP prefers to establish the number and location of test wells according to the structure and stratigraphy of the local geology.

3.5.a.1. The location of the sampling sites shown on the proposal or drainage map;

3.5.a.2. Water quality descriptions including information on total suspended solids, total dissolved solids, specific conductance, pH, acidity, alkalinity, sulfates, total iron, total manganese and aluminum sufficient to demonstrate seasonal variations; provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; provided further, that a limited number of validation samples may be required; and

3.5.a.3. Water quantity descriptions including seasonal flow rates, variation, usage and/or the elevation of water in test wells.

3.6. Cross-Sections.

3.6.a. Typical cross-sections shall be prepared which indicate the configuration of the permitted area before, during and after quarrying.

3.7 Consolidation of Permits.

3.7.a. Multiple permits which are consolidated under one permit shall be assigned the permit number of the most recently issued permit.

3.7.b. The anniversary date of the most recently issued permit shall be used as the date for renewal and submission of the annual Bonding Progress Report Map.

3.8. Special Land Use.

5.18. Abandonment of Haulageway. -- Upon abandonment of a haulageway, the haulageway shall be seeded and every effort made to prevent erosion by means of culverts, water bars or other devices.

5.19 Infrequently Used Access Roads. -- Infrequently used access roads are exempt from subsection 5.4 of this rule.

Existing roads should be exempt from some of the construction requirements where it can be demonstrated that reconstruction would result in greater environmental harm.

DEP response - DEP agrees. The following section is included in the Rule: "Existing Haulageway or Access Roads - Where existing roads are to be used for access or haulage and it can be demonstrated that reconstruction to meet the design and construction requirements of this section would result in greater environmental harm, sections 5.4.a., 5.4.b. and5.7.a will not apply. Provided, however, that the sediment control requirements must otherwise be met."

5.20. Certification. -- Prior to being utilized, all haulroads located outside the mineral extraction area or excess spoil disposal areas for which design criteria were approved as part of the permit shall be certified. Such certification shall affirm that construction was completed in accordance with the approved criteria, except as otherwise noted in the certification statement. Where the certification statement indicates a change from the design standards or construction requirements approved in the permit, such changes shall be documented in as-built plans. If as-built plans are submitted, the certification shall describe how and to what extent the construction deviates from the proposed design, and shall explain how and certify that the road shall meet rule standards. The certification shall be on forms approved by the director and signed by a qualified registered professional engineer, licensed land surveyor or approved person with experience in design and construction of roads.

§38-3-6.. Blasting.

6.1. Requirements. -- Each operator shall comply with all applicable state and federal laws in the use of explosives. The operator shall be responsible for all blasting operations including the transportation, storage and use of explosives within the permit area in accordance with the blasting plan.

6.2. Blasting Plan. -- Each application for a permit, where blasting is anticipated, shall include a blasting plan. The blasting plan shall explain how the applicant shall comply with the

vibration or may the decibel level exceed that established in WV Code §22-4-13(a).

6.5.i. No blasting within five hundred feet (500') of an underground mine not totally abandoned shall be permitted except with the concurrence of the director, the operator of the underground mine, and Mine Safety and Health Administration (MSHA). The director may prohibit blasting on specific areas where it is deemed necessary for the protection of public or private property, or the general welfare and safety of the public.

6.6. Preblast Survey.

6.6.a. The director shall review each pre-blast survey as to form and completeness only, and shall notify the operator of any deficiencies within fifteen (15) days.

6.6.b. Requirements for a preblast survey shall include the following:

6.6.b.1. Surveys shall be conducted and accepted by the director before the planned initiation of blasting operations;

6.6.b.2. If a structure within the requisite area is added to or renovated subsequent to a preblast survey, a survey of such additions and/or renovation shall be performed upon written request of the resident or owner, and such survey must be performed within thirty (30) days of notification of the request;

6.6.b.3. Copies of the report shall be provided to the person requesting the survey and to the director; and

6.6.b.4. Any person who receives a survey and who disagrees with the results of the survey, may submit a detailed description of the specific areas of disagreement.

6.7. Blasting Prohibited. -- The director or his authorized agent may prohibit blasting in specific areas where it is deemed necessary for the general safety of the area.

The phrase "…specific areas <u>of the permit</u> where…" should be added.

DEP response - DEP agrees. The phrase is included in the Rule.

6.8. Certified Blasting Personnel. -- Each person responsible for blasting operations shall be familiar with the blasting plan and blasting-related-performance standards for the operation at which they are working.

spoil material interferes with the flow of water in these ditches, that material shall be cleaned out immediately. The director may, in the exercise of his sound discretion, when not in conflict with WV Code §22-4, as amended, waive this rule.

This section should include the use of berms.

DEP response - DEP agrees. Berms are included in this Rule

7.4. Sediment.

7.4.a. Sediment Control. -- Drainage control structures shall be constructed in appropriate locations in order to control sedimentation. All such structures shall have a minimum capacity to store .125 acre-ft./acre of disturbed area in the watershed. This disturbed area shall include all land affected by previous operations that is not presently stabilized, and all land that will be affected within the component drainage area. Design criteria and construction specifications for embankment type sediment dams, excavated ponds, other water retarding structures and drainage control structures will be found in the Technical Handbook.

Pit control should be an accepted form of drainage control.

DEP response - DEP agrees. Section 7.6.b. has been added to this Rule.

7.4.b. The director may consider approving a reduced storage factor for sediment control structures where the applicant has demonstrated a reasonable likelihood, and the director finds that effluent limitations will be met.

7.4.c All sediment control structures shall be cleaned out to original designed storage when the sediment accumulation reaches sixty percent (60%) of design capacity. Sediment removed during the maintenance of drainage control structures shall be disposed of in a location approved by the director.

7.5. Drainage

7.5.a. Drainage Certification. -- Prior to disturbance in a component drainage area, the operator shall complete and certify the drainage and sediment control system in accordance with the approved permit. The certification shall be on forms approved by the director and signed by a qualified registered professional engineer, licensed land surveyor or an approved person.

7.5.b. As-Built Plans. -- Any deviations from the approved plan which result from unforeseen site specific circumstances arising during construction, shall be reflected in as-built plans submitted by the operator, and approved by the

director immediately following construction. The as-built plans shall include the following:

7.5.b.1. The original design;

7.5.b.2. The extent of the changes; and

7.5.b.3. The reference points. If as-built plans are submitted, the certification shall

7.5.b.3.A. Describe how and to what extent the construction deviates from the proposed design; and

7.5.b.3.B. Explain how and certify that the drainage structure will meet the provisions of this rule.

7.6. Water Quality Control.

7.6.a. All reasonable measures shall be taken to intercept all undisturbed surface water to prevent water from entering the pit area by the use of the following:

This requirement is not always necessary and it precludes pit control drainage.

DEP response - This section only requires that reasonable measures be taken to intercept water above the highwall. A diversion ditch above the highwall does not preclude the use of pit control.

7.6.a.1. Diversion ditches;

7.6.a.2. Culverts and drainage ditches; or

7.6.a.3. Other methods.

7.6.b. Pits may be used for temporary or auxiliary water storage and sediment control; provided however, that the pit storage does not contribute to water contamination as demonstrated by surface and ground water monitoring. Water accumulation in an active working pit shall be limited to those areas where it does not come into continual contact with loading or excavating equipment. Pits may also be used as permanent water impoundments if approved in the permit application as a part of the sediment control plan or reclamation plan.

7.6.c. All water discharges from the permit shall be monitored in accordance with the approved National Pollutant Discharge Elimination System (NPDES) permit issued to the operator and a written record of the testing dates and analytical data shall be kept current and made available for inspection. A compilation

of the foregoing information shall be submitted to the director in accordance with the approved permit.

7.6.d. Any treatment works necessary to meet effluent limitations shall be approved by the director. Discharge from the permit area shall not in any case violate federal or state water quality standards or effluent limitations.

7.6.e. The monitoring frequency shall be governed by the standards set forth in the National Pollutant Discharge Elimination System program under the federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et. seq., and the rules and regulations promulgated thereunder.

7.6.f. Water tests shall be taken before quarrying operations begin, and the results of these tests shall be shown in the permit application. The location for these preliminary tests shall be:

These water tests should not necessarily be located at the NPDES sampling sites because they may not have been established since the drainage structures are not yet built.

DEP response - These pre-quarry water tests are at locations above and below the proposed operation, not at the NPDES sampling sites.

7.6.f.1. On natural drainways above proposed quarrying operation; and

7.6.f.2. On natural drainways below proposed quarrying operations at or near the affected drainage area boundary.

7.7. Seeding of Drainage System. -- All areas disturbed in the installation of the drainage system shall be seeded and mulched after construction in accordance with section ten (10) of this rule.

§38-3-8. Method of Operation.

8.1. Operator Responsibility. -- In planning and executing quarrying operations, the operator shall have, at all times, proper regard for all requirements imposed by WV Code §22-4, as amended, all rules adopted pursuant thereto, and all provisions of the approved permit.

8.2. Topsoiling or Other Material Suitable for the Post Mining Land Use. - Topsoil or other suitable material shall be removed in a separate layer and distributed over the backfilled or disturbed

area, or if not utilized immediately, segregated and stockpiled in a separate location as specified in the permit. Topsoil not immediately utilized shall be protected from wind and water erosion.

The phrase "…suitable material necessary for reclamation and revegetation.." should be added.

DEP response - DEP agrees. The phrase is added.

8.2.a. Any material used for topsoiling must be capable of supporting and maintaining the approved post quarrying land use.

8.3. Treatment of Toxic Material. -- Any acid-forming, toxic-forming, combustible materials, or any other waste materials that are exposed, shall be covered with a minimum of four feet (4') of nontoxic and noncombustible material; or test, treat, and blend material to provide materials suitable to prevent water pollution. If necessary, this material shall be treated to neutralize toxicity in order to prevent water pollution and sustained combustion and/or to minimize adverse effects on plant growth and land uses. Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course so as to cause or pose a threat of water pollution.

8.3.a. The director shall specify thicker amounts of cover using non-toxic material where necessary to protect against the following:

8.3.a.1. Upward migration of salts;

8.3.a.2. Exposure by erosion;

8.3.a.3. To provide an adequate depth for plant growth; or

8.3.a.4. To otherwise meet local conditions.

8.4. Small Depressions. -- The requirement of this section to provide positive drainage does not prohibit construction of small depressions if they are approved by the director to minimize erosion, conserve soil moisture, benefit wildlife or promote revegetation. These depressions shall be compatible with the approved post-quarrying land use.

8.5. Backfilling. -- All available spoil material shall be used to backfill pit areas and provide positive drainage. Excess spoil shall be placed in controlled fills or spoil piles in accordance with Section 9 of this rule.

8.11.c. Plot plan of impoundment area;

8.11.d. Source of water entering the impoundment;

8.11.e. Quality of the water entering the impoundment;

8.11.f. Quality of water leaving the impoundment and mechanism of discharge;

8.11.g. Mineral or seams quarried or involved with impoundment;

8.11.h. Chemical characteristics of the soils and underlying strata in the impoundment area as they relate to acid production;

8.11.i. Safety aspects considered such as spillway overflow, emergency spillway, access to area; and

8.11.j. Consent of the landowner for such impoundment with submission on specified forms.

8.12.Backfilling and Regrading. -- All disturbed areas are to be reclaimed in accordance with the approved quarrying and reclamation plan. Land above the highwall shall not be disturbed unless the director finds that the disturbance will benefit the future land use of this site or facilitate compliance with the requirements of this section.

The operator should not be required to go off site to obtain material to backfill.

DEP response - It is not the intent of the of the Act or these Rules to require the operator to go off site to obtain material for backfilling.

8.13. Stabilization. -- The material used to backfill, reduce, or eliminate the highwall shall be sufficiently compacted or otherwise mechanically stabilized so as to ensure stability of the backfill. Woody materials may be buried in the mineral extraction area only when the burial does not cause or add to water pollution or instability.

§38-3-9. Excess Spoil Disposal, Temporary Spoil Storage Areas.

9.1. Disposal of Excess Spoil in Side of Hill Fills. -- Excess spoil or material to be placed in permanent disposal sites shall be transported to and placed in a controlled manner in

Office of Mining and Reclamation
#10 McJunkin Road
Nitro, West Virginia 25143-2506
Phone: 304-759-0510
Fax: 304-759-0528

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

August 21, 2000

Mr. Norman W. Wolcott
HC 82, Box 79
Marlinton, West Virginia 24954

Dear Mr. Wolcott:

Thank you very much for your comments on the proposed quarry rules. This agency if very concerned about having complete and accurate information contained in permit applications, including proper ownership information.

Chapter 22, Article 4, Section 5(b) requires that the application include information on the names and addresses of the owners of the surface and mineral to be quarried and the source of the applicants legal right to conduct quarrying on the land to be covered by the permit. Section 4(e) states "Nothing in this Article may be construed as vesting in the director the jurisdiction to adjudicate property-rights disputes". However, during the permit review process and the public comment period, if this agency becomes aware that the information submitted is not accurate, the application would be returned for corrections.

Further, the Application for a Permit to Conduct Quarrying (form MR-25) contains the following certification; "I (applicant's name) having been duly sworn, depose and attest that all the representations contained in this application are true and correct to the best of my knowledge and belief, that I am a principal officer (President, Vice President) of the applicant and that this application has been executed by the persons required by law. I further acknowledge that any information provided or omitted herein for the purpose of defrauding or misleading the West Virginia Division of Environmental Protection may result in the institution of criminal or civil charges and/or other enforcement actions pursuant to applicable state laws".

Although the agency does not have the authority to adjudicate property disputes, it does have the authority to verify that the applicant has the legal right to enter and conduct quarrying activities on the proposed area before the permit is issued.

If you have any questions, please feel free to call me at 304-759-0510.

Sincerely,

Harold M. Parsons, Jr.
Deputy Chief

HMP:fl

August 17, 2000

Rocky Parsons
Asst. Chief Office of Mining and Reclamation
10 McJunkin Rd
Nitro, WV 25143

Subject: Comments on Proposed Emergency Quarrying Regulations

The proposed regulations contain no guarantee that the applicant is the actual owner of the proposed area, or if he has a lease that the lessor is the actual owner of the property involved. By allowing the permitting process to proceed without resolving ownership disputes places an unfair burden on those disputing the ownership of the property. Disputants could be forced to post immense bonds because of disrupting the mining process which would seriously impair their ability to exercise their constitutional property rights. Granting a permit prior to the resoloution of all ownership questions is tantamount to deprivation of property without due process of law which is in violation of the U.S. Constitution.

Therefore it is suggested that the draft regulations should be amended to the effect that ". . . If during the premitting process it appears that the ownership of the permitted property is in question, then the DEP shall immediately suspend the permitting process until such time as all ownership questions have been resolved in courts of competent jurisdiction."

Yours truly,

Norman M. Wolcott
HC 82 Box 79
Marlinton, WV 24954

Office of Mining and Reclamation
10 McJunkin Road
Nitro, WV 25143
304-759-0510
304-759-0528

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

August 28, 2000

Mr. Gary H. Gess
Environmental and Governmental Affairs Director
Capitol Cement Corporation
South Queen Street
Post Office Box 885
Martinsburg, West Virginia 25402

Dear Mr. Gess:

Thank you very much for submitting comments on the proposed quarry rules. Attached please find DEP's responses to your comments. Those comments which were accepted by DEP have been included in the latest draft being filed with the Secretary of State's Office.

If you have any questions, please feel free to contact me.

Sincerely,

Harold M. Parsons, Jr.
Program Administrator

HMP:sh
Attachment

August 16, 2000

Mr. Harold Parsons
W V Division of Environmental Protection
10 McJunkin Road
Nitro, WV 25177

RE: Emergency Quarry Regulations
Title 38 Series 3
Rules for Quarrying and Reclamation

Dear Mr. Parsons:

Below please find Capitol Cement's comments and suggestions on the regulations as filed with the Secretary of State's office. As you will see most of our concerns involve where the language is not clear, is in conflict with WV Code 22-4 as revised, or is contrary to understandings developed during the process of revising WV Code 22-4.

1. Sec. 1: The wording in this section calls for an annual permit renewals. Permit renewals are every 5 years. A semicolon should be inserted between " Progress Report Map" and " Permit Renewals ". Also, aerial photographs should be included as acceptable for an Annual Bonding Progress Report Map since they are acceptable for the mining and reclamation plan as specified in the WV Code 22-4-5 (c) (1). I would also suggest that the annual map for bonding purposes be called the annual Bonding Status Map to clearly identify it as different from Progress Maps.

DEP response – The annual Progress Report Map is changed to annual Bonding Progress Report Map to distinguish it from renewal and progress maps. Section 14 is changed to allow for aerial photographs to be used instead of maps.

2. Sec 2.13: The definition of " haulageway or haulroad " should be changed to read " ------ a road which is used to transport material from the permit area to a public road " or the language in Section 5 needs to be changed so that **all** roads in the permit area do **not** have to meet the specified design criteria and be certified.

Roads in the permit area are constantly being changed and if they have to be designed, certified, and approved then this will require continuous permit modifications.

DEP response – Some haulroads do not connect the operation to a public road, but connect the operation to another mine site, spoil disposal area or to a processing area. Section 5 is changed so that construction plans must be certified only for roads "...outside the mineral extraction area or excess spoil disposal areas...".

3. Sec. 3.4.a: The applicant will not know **--before an application is filed --** what level of detail on fish and wildlife is needed. Also the WV Code 22-4-5 or 22-4-17 does not mention furnishing information on fish and wildlife.

DEP response – An application must be complete before being filed (22-4-6). The DEP requires that the operator contact the Dept. of Natural Resources' Wildlife Resources office for a Lands Inquiry Response. The inquiry includes an area of six miles radius of the operation conducted by the Mining Coordination Biologist who in notified of the pre-inspection. This is not a new requirement.

4. Sec. 3.5.a.2: Water information " sufficient to demonstrate seasonal variations " would require at least **1 year or longer of monitoring.** WV Code 22-4-14 specifies the testing to be required and it describes tests to establish a **six month baseline.**

DEP response – Due to comments received by others concerning the Rules exceeding the intent of the Act, the seasonable variation language for groundwater is changed to six-month monitoring. The agency would certainly encourage and accept longer monitoring.

5. Sec. 3.5.a.3: Water quality descriptions including seasonal flow rates will require at least **1 year or longer monitoring.** See comment # 3 above

DEP response - Due to comments received by others concerning the Rules exceeding the intent of the Act, the seasonable variation language for groundwater is changed to six-month monitoring. The agency would certainly encourage and accept longer monitoring.

6. Sec. 4.1: This section says that disturbed acres do not include acres that meet the requirements of Section 17. **Existing disturbed acres do not have to be reclaimed.** This makes it impossible for existing disturbed acres to meet this requirement?

DEP response – Section 17 is changed to allow for release of bond or contributions to the Bond Pooling Fund when the required reclamation is completed. Those areas that were disturbed on the effective date of the Act are exempted by 22-4-27(a)(1).

7. Sec. 6.2: This says the blasting plan shall include at a minimum the limitations the operator shall meet with regard to vibration and airblast. These requirements are in the WV Code 22-4 and should be included here.

DEP response – DEP tried not to repeat requirements that are spelled out in the Act.

8. Sec. 6.3.d: This requirement to notify citizens about the " methods used to control access " raises security concerns. To notify the public could invite someone to evade these measures to see a blast or some other reason. This can reduce safety instead of increasing it.

DEP response – DEP agrees. This requirement is deleted. The requirements of section 6.5.b.2. of these Rules satisfies this safety concern.

9. Sec. 6.5.b.1: The required audible warning and notification should be **for adjacent persons** and not those within 1.5 miles. This should be the same as Section 6.3 . The warning to persons on property " **adjacent to the blasting area** " is specified in WV Code 22-4-13 (d). As written this would require the notification of a good portion of South Martinsburg --- in Capitol's case --- which is obviously not necessary. The requirement that a warning signal be audible within ½ a mile will be annoying to the public and is not necessary.

DEP response – This section is changed to include the following: "The requirement of this paragraph may be waived by the director if adequate alternative warning and safety precautions can be substituted and are made a condition of the approved blasting plan".

10.Sec. 7.3.b : This should read " Drainage ditches **or other suitable means** shall

be constructed on the bench in order to carry off storm, surface or seepage water." This is needed so ditches are not the only acceptable means to channel this water.

DEP response – DEP agrees. This section is changed to include the following: "...or other suitable structures...".

11.Sec. 8.5: This should read that all available spoil material " **not located in a permanent spoil disposal area** " should be used to backfill pit areas. See WV code 22-4-18 (b)(2) for this and other exceptions.

DEP response – DEP disagrees. Material placed in a permanent excess spoil disposal area is not available for backfilling.

12.Sec. 8.12 : This says " **All disturbed areas** are to be reclaimed in accordance with the approved quarrying and reclamation plan. " Areas that are disturbed on the effective date of WV code 22-4 are excluded from this requirement according to Section 27 (a)(1). This exclusion needs to be included here.

DEP response – The statute clearly exempts areas that were disturbed on the effective date of the Act. DEP tried not to duplicate statutory requirements in these Rules. The approved quarrying and reclamation plan that has to be developed within two years can distinguish those areas that are exempt from reclamation.

13.Sec. 8.13 : The wording " or eliminate **the** highwall " implies that **all** highwalls are to be eliminated. This should be changed to " or eliminate **a** highwall "

DEP response – DEP agrees. The change is made.

14.Sec. 9.4.c.3 and .4 : The WV Code Sec. 22-4-18 (f) only requires that **permanent spoil piles be stabilized, covered with suitable material, and vegetated**. This section should only require certification that the piles are stable and that they be vegetated. The proposed language requires the same benching and sloping requirements as valley and side of hill fills which is not necessary as was decided during the discussions on revising WV Code 22-4.

DEP response – DEP disagrees. This is not a new requirement. The Rules under the previous statute required benching and sloping (38 CSR 2B 6.D.6d).

15.Sec. 14.1 : This section says that " reclaimed quarry land means those areas which meet bond release requirements ". Section 17 on Bond Release states that " upon completion of reclamation " and other requirements, the Bond will be released. **Existing disturbed areas are excluded from reclamation** in the WV Code and therefore could never meet the bond release requirements.

DEP response - Section 17 is changed to allow for release of bond or contributions to the Bond Pooling Fund when the required reclamation is completed. Those areas that were disturbed on the effective date of the Act are exempted by 22-4-27(a)(1).

16.Sec. 16.1 : There should not be any minimum inspection frequency. The Director should inspect as often as necessary to assure compliance. The WV Code does not specify a minimum or maximum frequency.

DEP response – DEP disagrees. For enforcement purposes, a minimum inspection frequency is needed to insure compliance. The Rule states that more inspections may be conducted as necessary to ensure compliance

17.Sec. 16 : There are no provisions for appeals of a Notice of Violation or other enforcement actions. It doesn't make sense for the first step of an appeal of an NOV or Order to be to the Surface Mine Board. There needs to be a stepped procedure starting with the inspectors supervisor.

DEP response – The first line of appeal is the informal assessment conference before the Assessment Officer. The operator can request an informal conference to allow the Officer to consider the fact of violation as well as the amount of penalty.

18.Sec. 17 : There are no provisions for existing disturbed acres, that do not have to be reclaimed, to qualify for bond release. This exclusion is found in the WV Code 22-4-27(a)(1).

DEP response - Section 17 is changed to allow for release of bond or contributions to the Bond Pooling Fund when the required reclamation is completed. Those areas that were disturbed on the effective date of the Act are exempted by 22-4-27(a)(1).

If you have any questions about these comments and suggestions please do not hesitate to contact me.

Sincerely,

Gary H. Gess
Environmental and Government Affairs Director

(ltrqrycm)

Office of Mining and Reclamation
10 McJunkin Road
Nitro, WV 25143
304-759-0510
304-759-0528

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

August 28, 2000

Mr. Michael L. Clowser
Executive Director
West Virginia Crushed Aggregates Council
2114 Kanawha Boulevard, East
Charleston, West Virginia 25311

Dear Mr. Clowser:

Thank you very much for submitting comments on the proposed quarry rules. Attached please find DEP's responses to your comments. Those comments which were accepted by DEP have been included in the latest draft being filed with the Secretary of State's Office.

If you have any questions, please feel free to contact me.

Sincerely,

Harold M. Parsons, Jr.
Program Administrator

HMP:sh
Attachment

QUARRY COMMENTS
AUGUST 21, 2000
TITLE 38 SERIES 3
RULES FOR QUARRYING AND RECLAMATION

38-3-2 DEFINITIONS

2.7 — Industry needs classification on what constitutes perennial stream under USGS guidelines.

DEP response – DEP will provide that information to the Crushed Aggregates Council, but does not intend to insert the USGS classification in these Rules.

2.29 — After the word "including", add the words "but not limited" so that other stabilization methods are not excluded.

DEP response – DEP agrees. The definition is changed.

38-3-3 PERMIT APPLICATIONS REQUIREMENTS AND CONTENTS

3.4 d.— Replace "prescribed time period" in last sentence to "30 days".

DEP response – DEP agrees. Thirty (30) days is inserted.

3.5.a.2 — This issue was very well debated during the legislation session. WV Code 22-4-14(b) specifies six (6) months water data up and down gradient. The term "seasonal variation" must be stricken and replaced with six (6) month time limit.

DEP response – DEP agrees. The seasonal variation language for groundwater is changed to six-month monitoring.

3.5.a.3 — As above, six (6) month testing was very well debated in the legislative session. "Seasonal flow rates" must be stricken.Also, WV Code 22-4-14 (b) provides that "test wells, seeps and springs may be utilized as is appropriate". This needs to be added.

DEP response – DEP agrees. The seasonal variation language for groundwater is changed to six-month monitoring.

38-3-5 HAULAGEWAYS AND TRANSPORTATION FACILITIES

5.2 — Inter-permit haul roads are exempt from certification and design. The proposed language exempts the roads from certification.The section needs further clarification that design of inter-permit haulroads is not required as well. This is an issue that we believe everyone is in agreement;just clarification is required.

DEP response – DEP disagrees. Some haulroads do not connect the operation to a public road, but connect the operation to another mine site, spoil disposal area or to a processing area. Section 5 is changed so that construction plans must be certified only for roads "...outside the mineral extraction area or excess spoil disposal areas..."

5.2.a. — **add this paragraph:**"Changes and/or improvements to the haulageway system shall be constructed in a manner that will result in a haulageway that conforms to the requirements and intent of subsection 5.4 of this rule. Such changes made shall be shown on future permit update documents and shall be supported by a certification statement by the permittee that the haulageway was properly constructed."

Operators need the latitude to make necessary changes and improvements in a timely manner without a requirement to first get permission and without the mandate to turn a simple "quarry road" into a much more costly engineering project. Operators will be obligated to properly construct a safe and conforming road, and they will certify that we followed the intent of the "rule".

DEP response – Section 10 of the Act requires that modifications be approved by the director before being implemented.

38-3-6 BLASTING

6.4.b.3 — What "certification number" is required?i.e. state Fire Marshall, Office of Blasting & Explosives, or other.

DEP response – Either certification number is acceptable. DEP dropped the requirement that blasters be certified by this agency.

6.5.c. — This needs to be stricken. This code does not provide for this requirement by the director.

DEP response – To prevent this from being an arbitrary requirement of the director, the language is changed. "Based upon the physical conditions at the site and when necessary to prevent injury to persons or damage to property, the director may require..."

6.5.e — This needs to be stricken. The codes does not provide for this requirement by the director.

DEP response – DEP disagrees. This requirement can not be an arbitrary decision of the director. The section states "...based upon the physical conditions at the site and when necessary to prevent injury to persons or damage to property..."

6.5.f — Industry has a major problem with this section. The director cannot, and should not, be allowed to arbitrarily change established blasting criteria. He already has the authority to require permit changes under 22-4-8 should he find that "ongoing quarry operations are causing or likely to cause any of the conditions set forth in the first paragraph of this section, he or she may order immediate cessation of such operations and he or she shall take such other action or *make such changes in the permit* as he or she may deem necessary to avoid said described conditions." However, specifically including the right of the director to arbitrarily make changes in blasting limits in the regulations is unfair as well as not authorized in the code.

DEP response – To prevent this from being an arbitrary requirement of the director, the language is changed. "Based upon the physical conditions at the site and when necessary to prevent injury to persons or damage to property, the director may require...".

6.6.b.1 — Insert language restating the distance required for pre-blast survey per the code (1,500' for new permits and to nearest structure within 1,000' for existing operations.)

DEP response – DEP has tried not to repeat statutory requirements in these Rules.

38-3-7 DRAINAGE SYSTEM

7.3.b — After the words "Drainage ditches," add "or other suitable means." There may be other suitable means (i.e. pipe). This makes only ditches acceptable to channel water.

DEP response – DEP agrees. This section is changed to include the following: "...or other suitable structures..."

7.7 — Add language to allow Rip Rap and other stabilization methods to give WVDEP and operator other options.

DEP response – DEP agrees. This section is changed to include mechanical stabilization in addition to revegetation.

38-3-8 METHOD OF OPERATION

8.5 — Backfilling — Change this language to the following, which is the definition of "Spoil materials, overburden, dirt rock or other material shall be used to reduce steepness of slope, to fill holes, depressions, or excavations, or any purpose as approved in the reclamation plan. Excess spoil shall be placed in controlled fills or spoil piles in accordance with Section 9 of this rule"

DEP response – DEP disagrees. The existing language requires that <u>all available</u> material be used to backfill. Material placed in permanent excess spoil disposal areas is not available.

8.6 — Delete in its entirety. This is very subjective and may be impossible to comply with.

DEP response – This is not a new requirement. Grading outer spoil was a requirement of 6.8 of the old Rules.

8.7 — Delete the last sentence starting with "Rills or gullies of lesser size..." These rills and gullies are insignificant and shouldn't be a problem.

DEP response – This is not a new requirement. Regrading rills and gullies was a requirement of 6.9 of the old Rules.

38-3-9 EXCESS SPOIL DISPOSAL, TEMPORARY SPOIL STORAGE AREAS

9.4.a. — Change the language to read:
"Based upon the stability analysis of the spoil pile,the director may limit the thickness of the layers so that they shall not exceed four feet."

DEP response – Section 9.4.c.3. is changed to "<u>Unless waived by the director based upon a stability analysis of the spoil pile,</u> the thickness of the layers shall not exceed four (4) feet ..."

38-3-16 — INSPECTION AND ENFORCEMENT

16.13 — Assessment rates need to be revised to reflect the value of a ton of aggregate rates are based on coal, which has a much higher value.The two are not . These comparable and the rates should reflect this.

DEP response - DEP disagrees. The rate of penalty is fair and can be appealed to the Assessment Officer.

38-3-17 — FINAL RELEASE OF BOND OR BOND POOLING FUND, FINAL INSPECTION REPORT

17 — What is the procedures for partial or incremental bond pool releases.

DEP response – The bond or contributions to the Bond Pooling Fund are adjusted annually. As area is reclaimed, the bond or contribution to the Fund for that area is released. This is in effect, an incremental bond release.

Office of Mining and Reclamation
10 McJunkin Road
Nitro, WV 25143
304-759-0510
304-759-0528

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

August 28, 2000

Mr. Tim Schmidt
Laurel Sand and Gravel, Inc.
14504 Green View Drive, Suite 210
Laurel, Maryland 20728

Dear Mr. Schmidt:

Thank you very much for submitting comments on the proposed quarry rules. Attached please find DEP's responses to your comments. Those comments which were accepted by DEP have been included in the latest draft being filed with the Secretary of State's Office.

If you have any questions, please feel free to contact me.

Sincerely,

Harold M. Parsons, Jr.
Program Administrator

HMP:sh
Attachment

Tim Schmidt
August 21, 20000

Suggested Changes to the Proposed Quarry Regulations

§38-3-2.17. "Perennial stream" should replace "Natural Drain way.

DEP response – The USGS definition of natural drainways includes not only perennial streams but also intermittent streams.

§38-3-2.22. "Processing" should include product stockpiles.

DEP response – DEP does not want to confuse processing with manufacturing operations. Product stockpiles are sometimes located at manufacturing sites.

§38-3-2.29. Add the phrase "but not limited to" between the words "including" and "the planting".

DEP response – DEP agrees. The definition is changed.

§38-3-3.4 "The scope and level" should be detailed in the regs.

DEP response – The scope and level of detail of wildlife resource information will be site specific and

should be determined by the appropriate agency with expertise in the area of study.

§38-3-3.4.c. A section should be added that describes what happens if an agency responds.

DEP response – In order for the director to issue a permit, it must be complete and comply with all applicable laws. If a state or federal agency responds, that agency will determine what permits or licenses, if any, will have to be obtained.

§38-3-3.4.d. The "prescribed time" in the last sentence should be specified in the regs.

DEP response – DEP agrees. The "prescribed time period" is changed to "thirty (30) days".

§38-3-3.5.a.3. Does this section require wells to be dug as part of the permit or to use existing nearby wells?

DEP response – Existing wells can and should be used when possible.

§38-3-4.3. Add a section that describes the exempted existing quarry areas according to the new law.

DEP response – Existing disturbed areas are not exempt from the bond requirements (22-4-27(d). DEP tried not to repeat statutory requirements in these Rules.

§38-3-5.13. This section should be revised to allow on-site material to be used for roads even if it is acid producing and there is no other material available on-site. This could be the case at our Thomas quarry, which means that we would have to haul material from our Scherr quarry – a half an hour away.

DEP response – This is not a new requirement. Section 3.12 of the old rules required that roads could not be surfaced with acid-producing or toxic materials. This is a prudent construction requirement meant to minimize the possibility of acid mine drainage.

§38-3-6.3. Replace "all residents" with "each residence". Otherwise we would have to notify each and every individual person in each structure.

DEP response – DEP agrees. The language is changed.

§38-3-6.5.i. How does the last sentence differ from §38-3-6.7.?

DEP response – DEP agrees. The language appears to re redundant and is deleted.

§38-3-6.7. See above. "[D]eemed" is too subjective. It should only be done with justification.

DEP response – DEP agrees. The language is changed to "determined".

§38-3-6.9. Are there any appeal provisions?

DEP response – Yes, the operator can request an informal hearing before the Assessment Officer to determine the fact of violation as well as the amount of penalty.

§38-3-7.7. Rip rap or other stabilization methods should be allowed.

DEP response – DEP agrees. The section is changed to include mechanical stabilization as well as revegetation.

§38-3-8.3. Our Thomas quarry may not have any material that is not considered "acid producing". Therefore, we would have to open a quarry nearby to supply 4' of cover or truck it from another existing quarry at a great expense. Either way the expense would force the closure of the Thomas quarry. We should be allowed to use the material found on-site.

DEP response – This is not a new requirement. This is the same requirement found in section 6.3 of the old Rules. This section also allows for the acid-forming material to be tested, treated and blended to prevent water pollution.

§38-3-8.5. This section should be written so that existing spoil does not have to be moved especially those areas that are stabilized.

DEP response – Quarry areas that are disturbed on the effective date of the Act are exempt from further reclamation requirements (22-4-27(a).

§38-3-8.8.a. Stabilization should include other methods in addition to vegetation.

DEP response – The definition of stabilize includes stabilization by "mechanical" as well as vegetative means.

§38-3-10.3.f.1.A.1. What is meant by "annual maintenance treatment"? Maintenance will cease when the bond is released.

DEP response – Table one is for hay or pasture land where it is assumed that annual maintenance will take place.

§38-3-10.3.f.1.A.3 etc. Ditto.

DEP response – This requires the operator to maintain the cover crop until the area is eligible for release.

§38-3-14.2. What does this mean? Aren't existing areas exempt?

DEP response - Quarry areas that are disturbed on the effective date of the Act are exempt from further reclamation requirements (22-4-27(a).

§38-3-16.9. A period should be inserted after "valid permit" and the rest of the sentence should be deleted.

DEP response – DEP disagrees. This section allows the director to issue a cessation order to wildcat operations which do not have a permit.

§38-3-16.12.c. This section is confusing with regard to who does what i.e., director vs. assessment officer.

DEP response – In this section, the director refers to the inspector and outlines his/her obligations in the assessment process.

§38-3-16.12.d. The new language in sentence four means that only detrimental evidence can be entered. In fairness, supportive evidence should be allowed also.

DEP response – DEP agrees. The word "adversely" is deleted.

§38-3-16.12.f. Once all rights have been waived DEP can then proceed with other penalties with impudence.

DEP response – Only the rights "...to further review of the violation or penalty in question, except as expressly provided for..." are waived.

§38-3-17. There should be language that includes partial or incremental bond pool releases.

DEP response – Bond or contributions to the Bond Pooling Fund are adjusted annually. As areas are

reclaimed, the bond or contribution to the Fund is released. In effect, this is the same as incremental release.

Table Two—The references to black locust do not distinguish between above or below 3000'.

DEP response – DEP agrees. The word "below" is added.