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# Proposed Regulation Agency Background Document

Agency name	Department of Mines, Minerals and Energy	
Virginia Administrative Code (VAC) citation		
Regulation title Safety and Health Regulations for Mineral Mining		
Action title	Technical Corrections and Amendments for Clarity, Consistency and Improved Safety Resulting from Periodic Review	
Date this document prepared	June 25, 2008	

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual.* 

## **Brief summary**

In a short paragraph, please summarize all substantive changes that are being proposed in this regulatory action.

As a result of periodic review, the Department of Mines, Minerals and Energy (DMME) is amending 4VAC25-40, Safety and Health Regulations for Mineral Mining. The amendments are intended to improve this chapter by making technical corrections, clarifying unclear language, updating references, making the regulation internally consistent and consistent with the Code of Virginia, and strengthening certain provisions relating to mine safety. Sections to be strengthened relate to blasting, mine rescue, and construction and maintenance of mine structures.

### Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly chapter number(s), if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.

The Department of Mines, Minerals and Energy is authorized to promulgate regulations necessary to the performance of its duties under §45.1-161.3 of the Code of Virginia. §§45.1-161.294 and 45.1-161.305 require that the Director of the Department promulgate regulations to ensure safe working conditions and practices at underground and surface mineral mines, respectively. This authority is mandatory.

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## Purpose

Please explain the need for the new or amended regulation by (1) detailing the specific reasons why this regulatory action is essential to protect the health, safety, or welfare of citizens, and (2) discussing the goals of the proposal, the environmental benefits, and the problems the proposal is intended to solve.

The purpose of the regulation at 4VAC25-40, Safety and Health Regulations for Mineral Mining, is to provide for the protection of persons and property on and around mineral (non-coal) mines. The proposed action is the result of periodic review. Even though no public comments were received during the review comment period, agency staff identified sections that would benefit from amendments as proposed herein. The amendments will improve this chapter by making technical corrections, clarifying unclear language, updating references, making the regulation internally consistent and consistent with the Code of Virginia, and strengthening certain provisions relating to mine safety. Because the regulation is specifically intended to protect persons and property from the effects of mining, the agency has determined that the proposed amendments are essential to protect the health, safety and welfare of citizens.

#### Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. (More detail about these changes is requested in the "Detail of changes" section.)

The intended action will amend provisions of an existing regulation. Unclear language in various sections will be clarified. Sections identified for clarification are those dealing with examination and inspection of workings, compliance with regulations, repairing machinery, exposure to airborne contaminants, loaders in operation, scaling bars, and open flame restrictions.

Several sections will be amended to make them internally consistent with other sections and with the Code of Virginia. References to external documents and the Code of Virginia will be corrected to reflect more recent publication dates of those documents; references to federal and other agencies that have changed their names will be updated. Corrections will be made to typographical and other technical errors.

In Part XV of the chapter, a number of sections will be moved to different articles to more efficiently organize the rules. Six sections dealing with mine rescue and evacuation will be moved from Article 2, Fire Prevention and Control, to Article 9, Safety Program. The heading for Article 6, Loading, Hauling, and Dumping, will be moved from the beginning of 4VAC25-40-3590 to the beginning of 4VAC25-40-3560 to fully encompass sections dealing with hauling. The heading for Article 10, Personnel Hoisting, will be moved from the beginning of 4VAC25-40-4090 to the beginning of 4VAC25-40-4070 to fully encompass sections dealing with hoisting.

During the periodic review, the agency identified sections dealing with mineral mine safety that would benefit from being strengthened. The agency intends to add a section requiring drill logs for boreholes intended for blasting. The agency also intends to amend other sections dealing with blasting to: require reporting of flyrock incidents; require review of drill logs before blasting; require that areas containing

loaded boreholes be posted as well as barricaded, if not guarded; require that drill logs be kept as part of the blast record; and require that electronic detonation systems be of an approved type. Regarding underground rescue in mineral mines, the agency intends to amend and generally strengthen sections dealing with mine rescue stations, equipment, crews, and self-contained breathing apparatus. Also for the purpose of improved safety, the agency intends to add one new section requiring that structures be substantial and well maintained.

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#### Issues

Please identify the issues associated with the proposed regulatory action, including:

- 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions;
- 2) the primary advantages and disadvantages to the agency or the Commonwealth; and
- 3) other pertinent matters of interest to the regulated community, government officials, and the public.

If the regulatory action poses no disadvantages to the public or the Commonwealth, please so indicate.

The proposed action will provide certain advantages to the public, particularly those who live near or work in mineral mines. Strengthening sections dealing with preparations for blasting and requiring mine operators to have a plan to control the affects of blasting on adjacent properties are intended to control the effects of blasting on the public. The strengthening of mine safety provisions such as those dealing with underground mine rescue and self-rescue devices will improve worker safety. Correcting existing unclear, inconsistent, or incorrect language will make the regulation more accurate and easy to understand. No disadvantages are foreseen for the public.

Since the amended regulations will be enforced with existing personnel in existing programs, there will be no additional cost or any other anticipated disadvantages for the Commonwealth.

At least one of the amended provisions will cause some mineral mine operators to incur additional costs, but the magnitude of these costs is not considered by the agency to be excessive in proportion to the safety benefits returned.

## Requirements more restrictive than federal

Please identify and describe any requirement of the proposal which are more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

In addition to regulations promulgated and enforced by Virginia's Department of Mines, Minerals and Energy, certain activities on mineral mine sites are also regulated by the U.S. Department of Labor, Mine Safety and Health Administration (MSHA) under 30 CFR Parts 1 through 199. The following sections of the proposed amendments contain language that could be interpreted as more restrictive than the applicable federal requirements, but DMME has determined that they are essential for meeting the intended purpose of the regulation, which is to protect people who work in or live near mineral mines:

#### 4VAC25-40-130

MSHA requires that an examination be made during the shift by a competent person, rather than a beginning of shift examination by a certified mine foreman as required in the Virginia rule. Examination at the beginning of a shift is considered by DMME to be important for eliminating any hazardous conditions that may be present before workers enter an area; the agency considers the certified foreman to be the

person most responsible for assuring safe conditions for workers. MSHA does not require a written report of hazards found and corrective actions taken. DMME considers these reports to be essential for investigating accidents and incidents.

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#### 4VAC25-40-800

MSHA requires all persons directing blasting to be experienced and trained, but does not require a certified blaster to be in charge. DMME considers the certification of blasters and the requirement that such a certified person be in charge of blasting operations to be critical in ensuring the safe use of explosives in mining. MSHA has no specific requirements for the blaster to monitor weather and review drill logs. DMME considers the monitoring of weather conditions and the reviewing of drill logs to be essential safe blasting practices.

#### 4VAC25-40-810

MSHA has no requirements on maintaining records of blasts. DMME considers blast records to be essential, for example, in investigating flyrock incidents and blasting-related citizen complaints.

#### 4VAC25-40-880, 4VAC25-40-890, and 4VAC25-40-893

MSHA has no requirements for monitoring ground vibration or air overpressures generated by blasting, nor do they have a requirement for controlling the offsite effects of blasting. MSHA's mandate is solely mine worker safety; DMME's role in protecting adjacent property owners from the effects of blasting is consistent with the agency's mission and citizens' expectations.

#### 4VAC25-40-1095

MSHA has no requirements for generating a drill log of blast holes. DMME considers drill logs to be a critical component of proper blast design, and an important resource during investigations of improper blasting.

## Localities particularly affected

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

Mineral mines governed by this regulation are present in 91% of Virginia's counties. The Department has determined that local governments will bear no material impact, and that all localities having mineral mines will be equally affected by this action.

#### Public participation

Please include a statement that in addition to any other comments on the proposal, the agency is seeking comments on the costs and benefits of the proposal and the impacts of the regulated community.

In addition to any other comments, the agency is seeking comments on the costs and benefits of the proposal and the potential impacts of this regulatory proposal. Also, the agency is seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include 1) projected reporting, recordkeeping and other administrative costs, 2) probable effect of the regulation on affected small businesses, and 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

Anyone wishing to submit written comments may do so by mail, email or fax to David B. Spears, Regulatory Coordinator, Department of Mines, Minerals and Energy, 202 North Ninth Street, Richmond,

Virginia 22903; email David.Spears@dmme.virginia.gov; fax 804-692-3237. Written comments must include the name and address of the commenter. In order to be considered comments must be received by the last date of the public comment period.

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A public hearing will be held and notice of the public hearing may appear on the Virginia Regulatory Town Hall website (www.townhall.virginia.gov) and can be found in the Calendar of Events section of the Virginia Register of Regulations. Both oral and written comments may be submitted at that time.

## **Economic impact**

Please identify the anticipated economic impact of the proposed regulation.

Projected cost to the state to implement and	The amended regulation will be enforced with
enforce the proposed regulation, including	existing personnel within existing programs. No
(a) fund source / fund detail, and (b) a	additional costs to the state are projected.
delineation of one-time versus on-going	
expenditures	
Projected cost of the regulation on localities	No additional costs are projected for localities.
Description of the individuals, businesses or	This regulation affects businesses operating
other entities likely to be affected by the	mineral (non-coal) mines and quarries in Virginia.
regulation	3
Agency's best estimate of the number of such	There are approximately 440 mineral mines
entities that will be affected. Please include an	distributed throughout the Commonwealth. Most of
estimate of the number of small businesses	these are small businesses.
<b>affected.</b> Small business means a business entity,	
including its affiliates, that (i) is independently	
owned and operated and (ii) employs fewer than	
500 full-time employees or has gross annual sales	
of less than \$6 million.	
All projected costs of the regulation for affected	Only the amendment at 4VAC25-40-893 requiring
individuals, businesses, or other entities.	mine operators to maintain a plan to control the
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Please be specific. Be sure to include the	affects of blasting on adjacent areas is projected to
projected reporting, recordkeeping, and other	cause additional expense for businesses. Mineral
administrative costs required for compliance by	mines required to develop such a plan will incur an
small businesses.	estimated average one-time cost of approximately
	\$300. There are about 130 such businesses in
	Virginia.

#### **Alternatives**

Please describe any viable alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in §2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulation.

During the periodic review and the preparation of the Notice of Intended Regulatory Action, the Department considered the alternative of taking no action. The agency determined, however, that taking no action would result in a regulation containing sections that were unclear, inaccurate, inconsistent, and

not as specific as necessary for achieving the intended purpose of protecting public health and safety in the most cost-effective manner. A less intrusive and less costly alternative for mine rescue plans for very small mines was considered, was determined to meet the essential purpose of the regulation, and has been included in the proposed changes. Although taking this action is considered by the Department to be the most effective means of updating the regulation, the agency will continue to seek public input to identify alternatives.

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## Regulatory flexibility analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

The agency has determined that less stringent compliance or reporting requirements, less stringent schedules or deadlines, simplification of reporting requirements, the establishment of performance standards to replace the regulation, or the exemption of small businesses would not meet the essential purpose of the regulation, which is to protect the health and safety of people working in or living near mineral mines. While the proposed amendments to this chapter are projected to have a moderate impact on small business, the agency nonetheless deems this action to be necessary.

#### Public comment

Please summarize all comments received during public comment period following the publication of the NOIRA, and provide the agency response.

No comments were received during the public comment period following the publication of the NOIRA.

## Family impact

Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The regulation at 4VAC25-40, Safety and Health Regulations for Mineral Mining, is intended to protect the health and safety of people working in or living near active mineral (non-coal) mines in Virginia. The current action, which is aimed at correcting, clarifying and strengthening this chapter, will increase the protection presently offered by the regulation. It will, therefore, provide additional protection to families who have members working in or living near mineral mines. The Department of Mines, Minerals and

Energy anticipates that the action will have no impact on the authority and rights of parents, economic self-sufficiency of families, the marital commitment, or disposable family income.

# Detail of changes

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Please detail all changes that are being proposed and the consequences of the proposed changes. Detail all new provisions and/or all changes to existing sections.

If the proposed regulation is intended to replace an emergency regulation, please list separately (1) all changes between the pre-emergency regulation and the proposed regulation, and (2) only changes made since the publication of the emergency regulation.

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
4VAC25- 40-25		Refers to Mineral Mine Safety Law of Virginia, 1997 edition	Change to Mineral Mine Safety Law of Virginia, 2005 edition; updates reference to reflect most current edition
4VAC25- 40-90		Incorporates by reference National Electrical Code, 1996 edition, and Boiler and Pressure Vessel Regulations, 1995	Change to National Electrical Code, 2008 edition, and Boiler and Pressure Vessel Regulations, 2007; updates references to reflect most current editions
4VAC25- 40-120		Only the certified surface foreman may conduct the preshift examination	Change "surface foreman" to "mine foreman"; corrects the requirement and clarifies that it applies to both surface and underground operations; change "preshift examination" to "examination made at the beginning of each shift"; makes section consistent with subsequent sections
4VAC25- 40-130		The certified mine foreman shall examine workings for hazards at the beginning of each shift and make a record of the examination	Specifies that the report of examination shall include date, areas examined, time of examination, hazards found, and corrective actions taken, and that the record shall be signed by the foreman; clarifies expected contents of records of examination
4VAC25- 40-190		Mine employees shall comply with regulations	Change "mine employees" to "miners"; many workers are contractors and are therefore not actually employees of the mine; clarifies that the requirement applies to all workers
4VAC25- 40-260		Areas containing hazards that are not "immediate" obvious shall be barricaded or posted with warnings	Change "immediate" to "immediately"; corrects an error in the existing language
4VAC25- 40-350		Energy sources other than those related to electricity or internal combustion shall be tagged out and signed during repairs	Add references to sections covering electrical and internal combustion energy sources; clarifies that those sources are also subject to tag-out requirements but are covered under separate sections. Changes "signed by the individuals doing the work" to "marked by means that identifies the individuals doing

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			the work"; allows for greater flexibility in using
			various appropriate tag-out devices
	4VAC25-40-	New	New section specifies that structures shall be
	365		of substantial construction and maintained in
			safe condition; intended to improve the safety
			of workers.
4VAC25-		Current language reads	Change to "Benches shall be wide enough to
40-410		"Benches shall be wide	allow safe operation and passage of
		enough to allow safe	equipment." Corrects a typographical error in
		operation and passage	the existing language.
		equipment."	
4VAC25-		Requires control of	Clarifies that the "approved program" be one
40-720		employee exposure to	"of controlling employee exposure to airborne
		airborne contaminants by	contaminants"; provides specificity to a
		feasible engineering	previously vague passage. Replaces
		methods. If such methods	"permissible" with "approved", and adds that
		are not available, requires	the approved equipment be "appropriate for
		an "approved program" to	the hazard." "Approved" is more accurate
		be implemented. Requires	than "permissible", which has a specific
		the wearing of "permissible"	meaning in federal regulations, and
		respiratory equipment	"appropriate for the hazard" adds clarity.
4VAC25-		Requires that structures for	For consistency with other sections, changes
40-780		storing explosives shall be	language to "of substantial construction";
		"constructed substantially";	for correctness, updates reference to federal
		requires reporting of	agency that has changed its name to "U.S.
		unaccounted loss of	Department of Justice, Bureau of Alcohol,
		explosives to U.S.	Tobacco, Firearms and Explosives"
		Department of Treasury	
		Bureau of Alcohol, Tobacco	
		and Firearms	
4VAC25-		Design of blasts shall	Adds a requirement that flyrock incidents
40-800		prevent flyrock; blast sites	shall be reported to the Division of Mineral
		shall be inspected and	Mining immediately; this effort is to increase
		safeguarded before	public safety near mineral mines is in
		bringing explosives to the	response to increased incidents of flyrock.
		site.	For clarity and improved safety, another
			change specifies that the certified blaster in
			charge shall conduct the preblast site
			inspections and shall review drill logs of
			boreholes intended for blasting
4VAC25-		Detailed records of each	Adds requirements that the blast record shall
40-810		surface blast shall be	include drill logs of boreholes, timing of
		prepared and maintained	detonations for each detonator, and a record
		by the certified blaster	of all anomalies and actions taken to correct
			them. These changes are proposed for
0.44.00=		<u> </u>	increased safety.
4VAC25-		If seismic monitoring of	Change language to state that seismic
40-880		blasts is not conducted, the	monitoring will be conducted unless
		maximum weight of	calculated scaled distance exceeds 90; this
		explosives used will be	reduces allowed ground vibration at inhabited
		limited using a scaled	buildings not owned by the mine operator,
		distance formula	thereby decreasing likelihood of damage to
4)/4005		Limite allowable sinkless of	neighboring properties.
4VAC25-		Limits allowable air blast at	Set a single limit of 133 decibels as
40-890		nearby inhabited buildings	measured with a 2Hz or lower flat response

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		to 129 decibels, or alternate	microphone. This type of microphone is now
		limits as measured by microphones with different	standard on air blast measuring equipment;
		•	other types as listed in the existing language
	4VAC25-40-	frequency responses  New	are no longer in use  Requires that mine operators maintain an
	893	New	action plan to control the affect of blasting on
	000		neighboring properties; intended to increase
			public safety.
	4VAC25-40-	New	Requires that electronic detonation systems
	925		be approved by the Director and used
			according to manufacturer's instructions.
			This is a fairly new technology that is
			becoming more widespread; the new section
			assures that the types to be employed have
			been approved as safe.
	4VAC25-40-	New	Lists required information to be included in
	1095		logs of drill holes intended for blasting;
			assures that logs adequately describe
			downhole conditions that may affect the
			safety of a blast. Intended to ensure safe blasting.
4VAC25-		Persons shall not work	Expands requirement to include that persons
40-1600		under buckets of loaders in	shall remain clear of all operating mobile
		operation	equipment, not just loaders; intended to
		'	improve worker safety
4VAC25-		Miners shall test the rock	Require testing of walls "where possible";
40-2790		walls of their working areas	some areas are simply inaccessible, due to
		for loose material	height, for example, and cannot be routinely
4) (4 005		A ban of group and another and	tested
4VAC25- 40-2800		A bar of proper length and blunt on one end shall be	Replace "of proper length and blunt on one end" with "of proper length and design".
40-2000		provided for scaling, the	Blunt may not be the most useful design for
		removal of loose material	this purpose
4VAC25-		Open flames and candles	Remove reference to candles, which are no
40-2980		shall not be left	longer used in modern mining, and state that
		underground	open flame torches shall be attended at all
			times while lit; this is a clarification for
			improved safety
4VAC25-		Mines employing 75 or	Strike and insert language as new 4VAC25-
40-3050		more people underground	40-4061 in Article 9; amend as noted below
		shall be equipped with 10	
		sets of self-contained breathing apparatus or be	
		affiliated with a central mine	
		rescue station	
4VAC25-		Mines not maintaining their	Strike entirely; section is duplicative with new
40-3060		own rescue stations shall	language in 4VAC25-40-4061
		affiliate with a central or	
4) / 4 C C C =		cooperative rescue station	0.7
4VAC25-		Mine rescue apparatus	Strike and insert language as new 4VAC25-
40-3070		acceptable to MSHA shall be maintained for	40-4062 in Article 9; amend as noted below
		immediate use; equipment	
		shall be tested monthly	
4VAC25-		Mines employing 75 or	Strike and insert language as new 4VAC25-
	I	ioo ompioying ro or	and moore language as now 1771020

40-3080		more people underground	40-4063 in Article 9; amend as noted below.
.0 0000		shall maintain at least two rescue crews and the crews	Provision for small mines is now covered in new 4VAC25-40-4064
		shall train at least annually.  Smaller mines shall have at	
		least one person trained for	
		every 10 working	
		underground	
4VAC25-		Rescue crews shall include	Strike entirely; section is duplicative with new
40-3090 4VAC25-		supervisory personnel  Mine evacuation drills shall	language in 4VAC25-40-4063
40-3110		be held every six months	Strike and insert language as new 4VAC25-40-4065 in Article 9
4VAC25-		All persons who work	Strike and insert language as new 4VAC25-
40-3120		underground shall receive annual training in evacuation plans	40-4066 in Article 9; amend as noted below
4VAC25-		Ladders inclined more than	Fixed ladders shall have the same
40-3800		70 degrees shall have	safeguards as 4VAC25-40-1990 and
		backguards, landing gates,	4VAC25-40-2000; makes ladder safety
4VAC25-		and landings every 30 feet  Rescue areas shall be	requirements consistent throughout chapter
40-3830		equipped with compressed	Amend to "adequate air and water supplies"; allows for bottled air and water to fulfill
10 0000		air lines and water lines	requirement. Add requirement for
			telephones in refuge areas for improved
			communications during emergencies
4VAC25-		Mines must have escape	Add requirement that evacuation plans be
40-3840		and evactuation plans	available to affiliated mine rescue teams; specify information to be shown on mine maps included in the plans, including all
			underground workings, ventilation fans, refuge chambers, first aid and firefighting
			supplies, electrical controls, and fuel and explosives storage areas; require plans for
			fire prevention, warning, evacuation, and
			emergency medical assistance; require
			specific statement of location and availability
			of mine rescue personnel and their training
4VAC25- 40-3990		One-hour self-rescue devices shall be available	Amend to also require a written plan for the
40-3990		to underground personnel	number, type, and location of self-rescue devices, and that they be sufficient for the
		to anaorground porconner	number of people working underground and
			the possible hazards of the mine; intended to
			improve worker safety.
4VAC25-		Workers required to go	Clarify that emergency training shall be in
40-4060		underground shall be trained annually in mine	applicable sections of U.S. Bureau of Mines Instruction Guide 19; specify that self-rescue
		emergency procedures and	training be given by a competent person
		the use of self-rescue	using the same model of device as provided
		devices	to worker; this ensures adequate training for
			emergencies
	4VAC25-40-		Insert language from existing 4VAC25-40-
	4061		3050 and amend to specify that affiliated mine rescue stations be able to provide two
			fully equipped mine rescue teams, and that
			such affiliation shall be in writing and

			approved by the Director; ensures adequate mine rescue capabilities
	4VAC25-40- 4062		Insert language from existing 4VAC25-40- 3070 and amend to specify that records of equipment tests be kept for at least one year; makes consistent with other recordkeeping requirements in the chapter
	4VAC25-40- 4063		Insert language from existing 4VAC25-40-3080 and amend to clarify that each rescue crew shall be five persons; add requirement that rescue crews shall include supervisory and key mine personnel; this requirement is being moved from 4VAC25-40-3090 to simplify the organization of these sections
	4VAC25-40- 4064		Offer alternative mine rescue capabilities for mines with fewer than 75 people working underground, with approval of Director. This alternative lessens the burden on small businesses.
	4VAC25-40- 4065		Insert language from existing 4VAC25-40-3110; mine evacuation drill shall be held every six months
	4VAC25-40- 4066		Insert language from existing 4VAC25-40- 3120 and amend to clarify that all persons who work underground shall be instructed in evacuation plans; intended to improve worker safety
4VAC25- 40-4240		Wire ropes shall meet certain minimum strength requirements	Correct two typographical errors: in subsection 2, replace "0.005L" with "0.0005L"; in subsection 3, replace "Tall ropes" with "Tail ropes"
4VAC25- 40-4260		Wire ropes shall be examined for damage	Correct one typographical error; in subsection E, second sentence, replace "subsection D" with "subsection B"
4VAC25- 40-4400		Buckets used to hoist persons in shafts over 50 feet deep shall have safety catches and protective bonnets	Amend to specify that such buckets shall have adequate guide ropes; this is intended to improve worker safety