### COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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MEMORANDUM TO:	Regional Directors Director, Division of Policy Director, Office of Air Compliance Director, Office of Air Permits Regional Air Compliance Managers Regional Air Permit Managers
CC:	James J. Golden, Deputy Director for Program Development Richard F. Weeks, Chief Deputy Director
FROM:	Michael Dowd, Director, Air Quality Division Mad
SUBJECT:	Fugitive Dust Control from Coal Mining Operations
DATE ISSUED:	June 9, 2011

This guidance provides additional clarification regarding the Department of Environmental Quality's (DEQ's) implementation of its responsibilities pursuant to the Memorandum of Agreement among DEQ and the Department of Mines Minerals and Energy (DMME) addressing fugitive dust from coal mining operations. DEQ and DMME entered into the Memorandum of Agreement, dated December 9, 2009, to facilitate efficient and effective administration of applicable State and Federal environmental laws, regulation and policies for the control of fugitive dust on and immediately adjacent to active coal mining sites (Attachment 1).

The DMME regulates land-disturbing activities associated with coal surface mining. DMME is the lead state agency with respect to enforcement of provisions of permits issued under Chapters 16 and 19 of Title 45.1 regarding coal mining operations in Virginia. DMME responsibilities include permit issuance, compliance oversight and enforcement. The Virginia Coal Surface Reclamation Regulations (4 VAC 25-130) provide DMME with the authority to require permitted facilities to implement additional measures to prevent or minimize fugitive dust. These additional measures are detailed in DMME Guidance Memorandum No. 29-09 (Attachment 2), and Procedure No. 3.3.18 (Attachment 3).

The DEQ has authority under the Regulations for the Control and Abatement of Air Pollution to regulate stationary sources in accordance with the standard for fugitive dust/emissions (9 VAC 5-40-90 and 9 VAC 5-50-90), in order to protect air quality.



Complaints received by the DEQ germane to fugitive dust from or associated with coal mining sites will be forwarded to the DMME for investigation in accordance with their policies and procedures. The DMME will notify DEQ of offsite fugitive dust complaints. The DEQ may review the DMME's investigation and response to recurring complaints to determine whether the mining operation was taking reasonable precautions to prevent particulate matter from becoming airborne.

Reasonable precautions available to sources in order to prevent particulate matter from becoming airborne may include, but are not limited to, the following:

- Utilization of truck washers to remove mud and debris from the trucks/trailers and bed prior to exiting the facility.
- Utilization of devices or methods to cause material to drop from trucks prior to exiting the mine property onto a public road.
- Implementation of reasonable precautions identified under 9 VAC 5-40-90 and 9 VAC 5-50-90 of the Regulations for the Control and Abatement of Air Pollution.

Appropriate reasonable precautions will be determined on a case-by-case basis and will take into consideration the potential impact on human health (e.g., proximity to human habitation and activities). Site conditions, technology requirements, and physical parameters are constantly changing at mining operations and control precautions that are effective at a particular site might not work at other facilities or at different times of the year.

If after consultation with DMME, DEQ finds that reasonable precautions are not being taken by a coal mining operation, DEQ will consider taking direct enforcement against the mining company pursuant to its authority under the State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution.

#### CONTACT INFORMATION

Questions regarding this guidance should be directed to the DEQ Southwest Regional Office of Air Compliance at (276) 676-4800 or the DEQ Central Office of Air Compliance Coordination at (804) 698-4000.

#### **MEMORANDUM OF AGREEMENT**

#### Between The Department of Mines, Minerals and Energy (DMME), And The Department of Environmental Quality (DEQ)

This Memorandum of Agreement (MOA or Agreement) is a statement of the intentions of the signatory agencies to coordinate their efforts in order to carry out their statutory duties. It is not a contract and it is not enforceable in any judicial or administrative forum. It does not create any rights or duties in any third party. It does not purport to modify the statutory duty of any signatory agency.

The purposes of this MOA are:

- 1. Facilitate efficient and effective administration of applicable State and Federal environmental laws, regulations and policies for the control of fugitive dust on and immediately adjacent to active coal mining sites.
- 2. Provide a mechanism for coordination.

This Agreement builds upon the long-standing cooperation between the agencies that has included regulation of dust both on and off permitted coal mine activity.

This Agreement acknowledges that DMME presently regulates land-disturbing, mining and reclamation activities from coal-mining operations by issuing Coal Surface Mining Operation (CSMO) permits. The DMME is delegated by the Federal Office of Surface Mining to administer the Federal Surface Mining Control and Reclamation Act (SMCRA) requirements. By this delegation, DMME has the responsibility for protection of public health and safety and the protection of the environment at CSMO permitted sites. The DMME utilizes enforcement action under the Virginia Coal Surface Mining Control and Reclamation Act of 1979 Title 45.1 Chapter 19.

This Agreement affirms the DEQ's responsibility to protect, enhance and maintain the quality of air of the Commonwealth as provided by law. The authority of DEQ to take such actions as are reasonably necessary, including adoption and enforcement of regulations, to achieve and maintain such levels of air quality as will protect human health, welfare and safety and, to the greatest degree practicable, prevent injury to plant and animal life and property and which will foster the comfort and convenience of the people of the Commonwealth and their enjoyment of life and property and which will promote the economic and social development of the Commonwealth and facilitate enjoyment of its attractions is not delegated or affected by this Agreement.

This Agreement is effective and will continue until terminated or amended as described below.

The parties agree as follows:

## 1. Coordination of regulatory development and coordination of site-specific issues between DMME and DEQ:

- a. The agencies agree that coordination and cooperation between the agencies is absolutely imperative for the assigned programs to be administered efficiently and effectively for the citizens of the Commonwealth of Virginia.
- b. The agencies agree to involve the signatories early in the development process whenever regulations, agency guidance or policy are being developed that would impact the operation or programs of the signatory.

The agencies agree to collaborate on technical merits of site-specific issues or permits based upon a request from either agency and to provide assistance and to consult with one another as deemed necessary by either agency.

#### 2. Responsibilities of DMME

- a. The DMME regulates land-disturbing activities associated with coal surface mining.
- b. Permits issued by DMME routinely contain provisions relating to the control of fugitive dust, as DMME has promulgated regulations for the control of fugitive dust on active coal-mining operations in the Commonwealth set forth at 4 VAC 25-130-780.18(b)(10), 4 VAC 25-130-784.13(b)(10), 4 VAC 25-130-816.150, 4 VAC 25-130-817.150 and 4 VAC 25-130-816.95.
- c. The DMME has issued a guidance memorandum and a procedure to the coal industry relating to road maintenance and fugitive dust.
- d. The DMME is the lead agency as designated in Virginia Code §45.1-161.6 with respect to enforcement of provisions of permits issued under Chapters 16 and 19 of Title 45.1.

#### 3. Responsibilities of DEQ and the State Air Pollution Control Board

- a. The State Air Pollution Control Board (SAPCB) has promulgated regulations for the general control of fugitive dust set forth at 9 VAC 5-40-90 and 9 VAC 5-50-90.
- b. DEQ has the authority under Virginia Code and the State Air Pollution Control Law to implement and enforce regulations promulgated by the SAPCB, including regulations for the control of fugitive dust.

#### 4. Acknowledgements

- a. The facilitation of efficient and effective administration of state environmental laws and regulations for the control of fugitive dust on and adjacent to active coal-mining operations is deemed to be in the public interest.
- b. The DMME and DEQ agree that coordination between the agencies is of great importance in order to efficiently and effectively administer their respective requirements

for the control of fugitive dust at or adjacent to coal-mining operations on behalf of the citizens of the Commonwealth.

- c. The DMME will be the lead agency with respect to enforcement of provisions of permits issued under Chapters 16 and 19 of Title 45.1, as required pursuant to Virginia Code §45.1-161.6. The agencies agree to collaborate as described in 1b of this Agreement.
- d. The DEQ will coordinate with DMME for investigation, of alleged violations of fugitive dust control regulations and requirements of the SAPCB for areas at coal-mining operations.
- e. The DMME will notify DEQ of offsite fugitive dust complaints.
- f. The DEQ's responsibility to protect, enhance and maintain the quality of air related to coal-mining operations permitted by DMME is affirmed. Moreover, the authority of DEQ to issue permits to coal-mining operations that require a SAPCB permit pursuant to SAPCB regulations, as well as to otherwise enforce the Virginia State Air Pollution Control Law, Code of Virginia §10.1-1300 et seq., and implementing regulations is not delegated or affected by this Agreement.

#### 5. Termination and Amendment.

The Agreement may be amended by mutual consent of the parties at any time. Either party may terminate this Agreement upon 180 days advance written notice to the other party. Amendments will be stated in writing and signed in the same manner as the Agreement itself.

Witness Signatures and Seals:

Director

Director Department of Mines Minerals and Energy

Date

Director

Department of Environmental Quality

12/9/2009

Date

#### DEPARTMENT OF MINES, MINERALS AND ENERGY DIVISION OF MINED LAND RECLAMATION

# GUIDANCE MEMORANDUM<sup>1</sup> No. 29-09Issue Date:11/01/09Subject:Roads - Maintenance and Fugitive Dust Control

Since January 2005, the Division has investigated approximately 250 complaints from citizens concerning tracking of material or fugitive dust from permitted haulroads and coal surface mining operations. In the majority of the complaints, the Division's inspectors determined the haulroads were properly maintained per the permit's approved plans. Where the roads were not properly maintained, enforcement action was taken.

The Division is looking at additional measures that may be taken to better address concerns regarding the tracking or depositing of material onto public roadways and generation of fugitive dust from coal surface mining and reclamation operations.

The Division has been working with coal companies, the Virginia Department of Environmental Quality (DEQ), Virginia Department of Transportation (VDOT), the Virginia State Police (VSP), and citizens to better address fugitive dust problems. Several coal companies have or are in the process of taking voluntary measures to address the dust and tracking problems that occur in some coalfield communities. These companies have employed such preventative measures as voluntary paving of haulroads within the permit, utilizing sweeper/vacuum trucks on both the paved haulroad and public roads, and installation of truck washer facilities to spray dirt, mud, and debris from coal trucks prior to their exit from the permit area.

§§ <u>4 VAC 25-130-816.150</u>(c) and (e) and <u>4 VAC 25-130-817.150</u> (c) and (e) of the **Virginia Coal Surface Mining Reclamation Regulations**, provides the Division the authority to require a permittee to implement additional measures to ensure proper design and maintenance of its haulroad(s) to prevent/minimize fugitive dust problems -

"(c) Design and construction limits and establishment of design criteria. To ensure environmental protection appropriate for their planned duration and use, including consideration of the type and size of equipment used, the design and construction or reconstruction of roads shall incorporate appropriate limits for grade, width, surface materials, surface drainage control, culvert placement, and culvert size, in accordance with current, prudent engineering practices, <u>and any necessary design criteria established by the division</u>." (Emphasis added)

<sup>&</sup>lt;sup>1</sup> This Memorandum is to be considered guidance issued under the authority of § 45.1-230.A1 of the Code of Virginia which reads:

<sup>&</sup>quot;In addition to the adoption of regulations under this chapter, the Director may at his discretion issue or distribute to the public interpretative, advisory or procedural bulletins or guidelines pertaining to permit applications or to matters reasonably related thereto without following any of the procedures set forth in the Administrative Process Act (§ 2.2-4000 et seq.). The materials shall be clearly designated as to their nature, shall be solely for purposes of public information and education, and shall not have the force of regulations under this chapter or under any other provision of this Code."

#### GUIDANCE MEMORANDUM<sup>1</sup> No. 29-09 Issue Date: 11/1/09 Subject: Roads – Maintenance and Fugitive Dust Control Page 2 of 2

In instances where tracking of material and/or fugitive dust from a permitted operation is a concern, the Division may require the company to develop and implement a road maintenance plan. The plan should include the measures the company will take to better control and minimize tracking of material onto public roads and fugitive dust that may be generated as a result of traffic from its operations. The plan may include such measures as (but not be limited to) -

- 1. Reducing speed on traveled roads and ensuring truck beds are covered.
- 2. Watering roads regularly with water trucks, sprinklers, etc. or applying dust binders.
- 3. Ensuring adequate road surfacing is applied and maintained or paving the road.
- 4. On paved roads, using devices (e.g., rumble strips) or cattle crossings on gravel roads, to cause material to drop from trucks prior to exiting the permit to the public road and regularly cleaning and removing the mud or debris from the paved road, so it is not tracked from the permit.
- 5. Utilizing truck washers to remove mud and debris from the coal trucks/trailers.

The road design, maintenance, and fugitive dust control measures to be utilized would be dependent on the circumstances at a particular area. In populated communities, a variety of measures could and should be used if needed to address the tracking and dust problems. In remote areas, maintaining a suitable gravel surface and watering may be sufficient and adequate.

In looking at road maintenance, the Division has noted that a haulroad may be in excellent paved condition. However, as most trucks go to the pit area, they will pick up mud and material in the loading process. As a coal truck exits the pit area and begins to pick up speed on the paved road, material begins to drop off. Depending on the length of the paved road, this may occur on the permitted road or later on the public roads.

Should the Division observe a situation where mud or material from the coal truck falls off onto the public road (such as when the truck crosses a railroad crossing) and becomes a hazard to the public safety and health, the Inspector may issue the permittee enforcement action to revise its road maintenance operation plan to address or prevent this type of problem from reoccurring.

In reviewing a revision, new permit, or renewal application, the Division will look at the current or potential situation to determine whether fugitive dust may be a concern. The Division may request a more comprehensive road maintenance plan under §§4 VAC25-130-816/817.150(c) to address potential or actual fugitive dust control problems. This may also occur at mid-term review.

Should you have any questions regarding this guidance document or the topics of this memorandum, please contact your area Inspector, the Reclamation Services Manager at (276) 523-8197, or the Technical Services Manager at (276) 523-8156.

#### ATTACHMENT 3

DIVISION OF MINED LAND RECLAMATION PROCEDURES MANUAL		PROCEDURE NO. ISSUE DATE		<b>3.3.18</b> 11/1/2009
		Last Revised		с.

#### **OBJECTIVE AND INTENT**:

To ensure the permittee properly plans and implements an effective road maintenance and fugitive dust control plan to prevent adverse impacts to the public health and safety.

#### **GENERAL**:

 <u>4 VAC 25-130-816.150</u>(c) and (e) and <u>4 VAC 25-130-817.150</u> (c) and (e) of the **Virginia Coal Surface Mining Reclamation Regulations**, provides the Division's authority to require a permittee implement additional measures to ensure proper design and maintenance of its haulroad(s) to prevent/minimize fugitive dust problems -

"(c) Design and construction limits and establishment of design criteria. To ensure environmental protection appropriate for their planned duration and use, including consideration of the type and size of equipment used, the design and construction or reconstruction of roads shall incorporate appropriate limits for grade, width, surface materials, surface drainage control, culvert placement, and culvert size, in accordance with current, prudent engineering practices, and any necessary design criteria established by the division." (Emphasis added)

#### **PROCEDURES:**

In instances where noticeable tracking of material and/or fugitive dust from a permitted operation onto public roadways or communities are occurring, the Reclamation Inspector shall document the occurrence with pictures. The time, date, weather conditions, and other relevant information should be documented in a memo or report.

The Division does not have jurisdiction to require a permittee to remove material from the public road. If the problem is occurring due to lack of proper haul road maintenance, the Inspector shall issue the appropriate enforcement action to compel compliance with the approved operation plans.

In the event the approved plans do not adequately address the site conditions or concerns, the Inspector may require the company by revision order notice (RON) to develop and implement a road maintenance plan that will specify the measures the company will take to better control and minimize tracking of material onto public roads and the generation of fugitive dust that results from its operation's traffic. The plan may include such measures as (but not be limited to) -

1. Reducing speed on traveled roads and ensuring truck beds are covered.

2. Watering roads regularly with water trucks, sprinklers, etc. or applying dust binders.

DIVISION OF MINED LAND RECLAMATION PROCEDURES MANUAL		PROCEDURE NO. ISSUE DATE		<b>3.3.18</b> 11/1/2009
		Last Revised		·

- 3. Ensuring adequate road surfacing is applied and maintained or paving the road.
- 4. On paved roads, using devices (e.g., rumble strips) or cattle crossings on gravel roads to cause material to drop from trucks prior to exiting the permit to the public road and regularly cleaning and removing the mud or debris from the paved road, so it is not tracked from the permit.

5. Utilizing truck washers to remove mud and debris from the coal trucks/trailers.

Although a road may be paved and in excellent condition, tracking or depositing of mud or material onto offsite areas may still occur. This may be a result of trucks going to and from the pit area. In this situation, the Inspector should note whether mud and material is being picked up in the loading process, and whether material is being deposited onto the paved road or public road after the coal truck exits the pit area. If mud and debris is deposited onto the paved haulroad, the Inspector shall instruct the permittee/operator to remove the material and properly dispose of such. The Division cannot require the company to remove material from the public road.

If the haulroad clean-up work is not initiated or carried out before the Inspector is ready to leave the permit, a notice of violation shall be issued requiring the necessary remedial action. Should the Inspector note deposition of mud and debris onto the public road from the traffic leaving the permit area, a RON may be issued to the permittee. The RON would require the permittee to revise its road maintenance plan to ensure that material was not being tracked from its permit to the degree that it would pose an actual or potential threat to the public health and safety. The Inspector could recommend that the permittee create a central paved area where the coal trucks could be loaded, instead of going to the pit areas.

The soil and sediment collected as part of the road maintenance program should be returned to the permit area for reclamation use.

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