APPLICATION SUPPLEMENT
NATURALLY OCCURRING ASBESTOS (NOA)

Applicability: This supplement is applicable only for those operations where the permit area or areas in proximity contain igneous and/or metamorphic rock types (and their derived soils) with the potential to host *naturally occurring asbestos* (NOA).

The purpose of this application supplement to the noncoal permit application is as follows:

- Supply additional information about the geologic deposits (rock and soil) that exist within the permit area that have the potential to host NOA.
- Provide an assessment regarding the disturbance and possible emission of NOA into the atmosphere (as *fugitive dust*).
- Determine if the applicant needs to develop a monitoring plan in cases where NOA is known to be present or is potentially present.
- Determine if the applicant needs to develop a mitigation plan in cases where NOA is known to be present or is potentially present.

Submittal: This supplement must be prepared and submitted by a Pennsylvania-registered professional geologist (PG) with experience in NOA mineralogy and petrology.[1] If a site is determined to contain NOA, a *subject matter expert* (SME) may be required to establish appropriate monitoring protocols and engineering controls.

The operator is encouraged to consult with their respective Department of Environmental Protection (DEP) District Mining Office (DMO) prior to submitting this supplemental information. If the operator determines that NOA is known to exist or may exist on the site, a pre-application meeting is strongly encouraged prior to application submittal.

Definitions

"*Naturally occurring asbestos*" *(NOA)* is defined as asbestos that is a natural component of soils or rocks as opposed to a commercially processed or manufactured asbestos containing material (such as insulation or pipe wrapping) that has been imported to a site.

"*Fugitive dust*" is defined in §77.1 as "Particulate matter not emitted from a duct or stack which becomes airborne due to the forces of wind or surface noncoal mining activities, or both. During surface noncoal mining activities the term may include emissions from haul roads; wind erosion of exposed surfaces, storage piles, processing facilities and spoil piles; reclamation operations; and other activities in which material is either removed, stored, transported or redistributed."

"Subject matter expert" (SME) is defined as a professional individual who possesses expert level knowledge of a particular discipline. This individual should hold professional licensure or accreditation (i.e. registered Professional Geologist (PG), registered Professional Engineer (PE), Certified Industrial Hygienist (CIH), or other qualified person). For the purposes of this supplement, expertise should be met through education and experience with respect to initial identification, testing/monitoring, and mitigation of NOA or asbestos.

[1] If the NOA expert is not a PA-registered PG then the applicant must supply the submittal through a licensed PG who has reviewed and approved the site-specific information.

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Provide the following documentation and plans as specified.

1. Naturally Occurring Asbestos (NOA) determination [§§ 77.130, 77.404, 77.410]

Select one of the following and attach a geologic assessment in support:

☐ NOA is not expected to exist within the proposed/existing permit and/or general area.
No additional information for this supplement will need to be submitted.

☐ NOA may exist within the proposed/existing permit area based on the geologic setting. Provide the following additional items:

a. Results of exploration and testing that was designed to detect NOA in the rock mass or in specific NOA-bearing zones. This may take the form of a qualitative geologic survey including exploration drilling, face sampling, geological mapping, etc.

b. Include a petrographic analysis report (including microscopy).

c. Explain the proposed monitoring program (Section 3)

☐ NOA is known to exist within the proposed/existing permit area. Provide the following additional items:

a. Results of exploration and testing that was designed to detect NOA in the rock mass or in specific NOA-bearing zones. This may take the form of a qualitative geologic survey including exploration drilling, face sampling, geological mapping, etc.

b. Include a petrographic analysis report (including microscopy).

c. Explain the proposed monitoring program (Section 3).

d. Explain the engineering controls to be utilized to control fugitive emissions (Section 4).

e. Explain how NOA-containing material will be handled (Section 5).

2. Proximity Assessment [§§ 77.130, 77.455, 77.575]

a. Indicate if any of the following are adjacent to the permit area. Supply distances or range of distance, and orientation to prevailing wind direction.

- Residential areas
- Commercial areas
- Schools, parks, churches, or other community areas

If none are adjacent, indicate the approximate closest distance of the nearest area listed above. (Data may be presented as a table.)

b. Provide a map highlighting this information. The map should show at least the area within 1000 feet of the permit area and include relevant details from subsequent sections as applicable.

3. Inspection and Testing Plan [§§ 77.130, 77.352, 77.455, 77.575]

a. For mine sites with potential or confirmed presence of NOA, attach the monitoring, testing, and inspection plans regarding NOA during operations and reclamation.

b. Discuss the methodology to be used for the following measures, as applicable:

- Rock sampling
- Settled dust sampling

- Property boundary air sampling
- Discharge water sampling

4. Mitigation Plan [§§ 77.130, 77.596, 77.631]

Describe the NOA mitigation plan to be implemented to minimize or control the possible liberation/migration of NOA into the atmosphere. Specify all Best Management Practices and Engineering Controls to be used.

5. NOA-containing Material Handling Plan [§§ 77.456]

a. Provide a detailed plan for management of NOA-containing material.

b. Discuss the activities regarding stabilization and fate of NOA-containing material or potential NOA-containing material (i.e. plant and/or pond fines). Describe proposed inspection and documentation plans for this material.