MEMORANDUM

To: Mineral Mine Operators

From: Conrad T. Spangler

Subject: Mine Maps

Date: December 9, 1994

The Virginia Mine Safety Act requires each mineral mine operator make an accurate scale map of the mine workings. The original map must be kept by the mine operator, with a copy furnished to the Division of Mineral Mining. The mine safety map requirements are found at Section 45.1-161.64 of the Code of Virginia. These requirements are in addition to the reclamation map requirements at Section 45.1-181 of the Code of Virginia and Part IV of the reclamation regulations.

In order to minimize burden on operators, mine safety maps will only need to be furnished to DMM with annual permit/license renewal documents. Updates will be required every 6 months thereafter only if there are changes in the information that must be shown on the map.

Operators also have the flexibility either to submit separate safety and reclamation maps, or combine the requirements of the Virginia Mine Safety Act and the Mineral Mining Reclamation law in one map.

The Virginia Mine Safety Act provides that, with limited exceptions, mine safety are to be held confidential (subsections 45.1-161.64 B and E). There are no confidentiality provisions for reclamation maps. If an operator elects to submit one map to satisfy both the mine safety and reclamation map requirements, then DMME cannot hold the combined map confidential. The operator will be deemed to have waived his right to map confidentiality by virtue of his election to make the joint map submittal. If an operator submits separate mine safety and reclamation maps, then DMME can hold the safety map confidential. Such mine safety maps should be clearly marked "Mine Safety Map—Confidential."

To assist operators in meeting the map requirements, DMM has drafted the attached list of features to be included (i) on a mine map submitted for the Mine Safety Act requirements only, or (ii) on a mine map submitted for both mine safety and reclamation requirements.

If you have any questions please contact Mark Goff at (434) 951-6313.

Attachments

INFORMATION FOR MINE SAFETY MAPS
CODE OF VIRGINIA § 45.1-161.64.B

Surface Mineral Mine (Quarries)

A. Location of pits, permit boundaries and property lines
B. Cross-section of active walls showing height and width of benches—typical
C. General inclination of rock strata where applicable
D. Location of explosive storage areas
E. Location of fuel storage areas and containment structures
F. Location of access and haul roads
G. Location of water impoundments
H. General location map
I. Map scale to be 100 to 400 feet to the inch and stated on the map
J. Identify the USGS quadrangle
K. Map legend to be provided and affixed to the map
L. North arrow
M. Date map was prepared
N. Location of electrical substations
O. Property lines of the tract being mined that are within 1,000 feet of any part of the mine workings
P. Outcrop of the mineral where applicable on the tract being mined that are within 1,000 feet of any part of the mine workings

Surface—Open Pit Mineral Mines (sand and gravel, etc.)

A. Location of pits, permit boundaries and property lines
B. Height of active faces in the pit—maximum
C. Location of fuel storage areas and containment structures
D. Location of access and haul roads
E. Location of water impoundments
F. General Location map
G. Map Scale to be 100 to 400 feet to the inch and stated on the map
H. Identify the USGS quadrangle
I. Map legend to be provided and affixed to the map
J. North arrow
K. Date map was prepared
L. Location of electrical substations
M. Property lines of the tract being mined that are within 1,000 feet of any part of the mine workings
N. Outcrop of the mineral where applicable on the tract being mined that are within 1,000 feet of any part of the mine workings.

Underground Mineral Mine

A. Location of all openings, excavations, shafts, slopes and entries
B. Location of main travelways, headings, rooms, pillars and airways with darts or arrows to show direction of air flow
C. Location of abandoned, collapsed areas and filled areas of the underground workings
D. Location of flooded underground workings and sumps
E. Location of escapeways
F. Location of shop areas
G. Location of mine ventilation fans
H. General inclination of rock strata where applicable
I. Location of explosives storage areas
J. Location of property lines of the tract being mined that are within 1,000 feet of any part of the mine workings
K. General location map
L. Map scale to be 100 to 400 feet to the inch and stated on the map
M. Identify the USGS quadrangle
N. Map legend to be provided and affixed to the map
O. North arrow
P. Date map was prepared
Q. Location of electrical substations
R. Outcrop of the mineral where applicable on the tract being mined that are within 1,000 feet of any part of the mine workings

INFORMATION FOR COMBINED SAFETY/RECLAMATION MAP
CODE OF VIRGINIA §§ 45.1-161.64.b AND 45.1-181; AND
§ 4 OF THE MINERAL MINING RECLAMATION REGULATIONS

Surface Mineral Mine (Quarries)

A. Location of pits, permit boundaries, property lines and the names of property owners within 100 feet of the affected area
B. Area to be mined, total number of acres involved in the affected area
C. Drainage plan, including direction of flow, constructed drainways and sediment control structures, natural waterways used for drainage, and stream and tributaries receiving the discharge unless shown as a separate drainage map.
D. Typical cross-section of activity walls showing height and width of benches
E. General inclination of rock strata where applicable
F. Location of explosive storage areas
G. Location of fuel storage areas and fuel containment structures
H. Location of access and haulroads
I. Location of water impoundments
J. Location and names of all streams, creeks and other bodies of public water on the affected area and within 500 feet
K. Location and names of roads, buildings, cemeteries, oil and gas wells, and utility lines on the affected area and within 500 feet
L. General location map
M. Map scale to be 100 to 400 feet to the inch and stated on the map
N. Identify the USGS quadrangle
O. Date map was prepared
P. Prescribed map legend to be firmly affixed
Q. Prescribed color code
R. North arrow
S. Location of electrical substations
T. Property lines of the tract being mined that are within 1,000 feet of any part of the mine workings
U. Outcrop of the mineral where applicable on the tract being mined that are within 1,000 feet of any part of the mine workings

Surface Mineral Mines (Open Pit Sand & Gravel, etc.)

A. Location of pits, permit boundaries, property lines and the names of property owners within 100 feet of the affected area
B. Area to be mined, total number of acres involved in the affected area
C. Drainage plan, including direction of flow, constructed drainways and sediment control structures, natural waterways used for drainage, and streams and tributaries receiving the discharge unless shown as a separate drainage map
D. Maximum height of active faces in the pit
E. Location of fuel storage areas and fuel containment structures
F. Location of access and haulroads
G. Location of water impoundments
H. Location and names of all streams, creeks and other bodies of public water on the affected area and within 500 feet
I. Location and names of roads, buildings, cemeteries, oil and gas wells, and utility lines on the affected area and within 500 feet
J. General location map
K. Map scale to be 100 to 400 feet to the inch and stated on the map
L. Identify the USGS quadrangle
M. Date map was prepared
N. Prescribed map legend to be firmly affixed
O. Prescribed color code
P. North arrow
Q. Location of electrical substations
R. Property lines of the tract being mined that are within 1,000 feet of any part of the mine workings
S. Outcrop of the mineral where applicable on the tract being mined that are within 1,000 feet of any part of the mine workings

Underground Mineral Mine

A. Location of all openings, shafts, slopes, entries, property lines and the name of property owners within 100 feet of the affected surface area.
B. Location of all main travelways, headings, rooms, pillars and airways with darts showing the direction of air flow
C. Location of abandoned, collapsed areas and filled areas of the underground mine workings
D. Location of flooded underground mine workings and sumps
E. Location of escapeways
F. Location of shop areas
G. Location of mine ventilation fans
H. Surface area to be affected, total number of acres involved in the affected area
I. Drainage plan, including direction of flow, constructed drainways and sediment control structures, natural waterways used for drainage, and streams and tributaries receiving the discharge unless shown as a separate drainage map
J. General inclination of rock strata where applicable
K. Location of explosive storage areas
L. Location of fuel storage areas and fuel containment structures
M. Location of access and haulroads
N. Location of water impoundments
O. Location and names of all streams, creeks and other bodies of public water on the affected area and within 500 feet
P. Location and names of roads, buildings, cemeteries, oil and gas wells, and utility lines on the affected area and within 500 feet
Q. General location map
R. Map scale to be 100 to 400 feet to the inch and stated on the map
S. Identify the USGS quadrangle
T. Date map was prepared
U. Prescribed map legend to be firmly affixed
V. Prescribed color code
W. North arrow
X. Location of electrical substations
Y. Property lines of the tract being mined that are within 1,000 feet
Z. Outcrop of the mineral where applicable on the tract of land being mined that are within 1,000 feet of any part of the mine workings

The Virginia Mine Safety Act provides that, with limited exceptions, mine safety maps are to be held confidential (subsections 45.1-161.64 B and E). There are no confidentiality provisions for reclamation maps.

If a mineral mine operator elects to submit one map to satisfy both the mine safety and reclamation map requirements, then DMME cannot hold the combined map confidential. The operator will be deemed to have waived his right to map confidentiality by virtue of his election to make the joint map submittal.

If an operator submits separate mine safety and reclamation maps, then DMME can hold the safety map confidential. Such mine safety maps should be clearly marked "Mine Safety Map—Confidential."