

## VIRGINIA ACTS OF ASSEMBLY — CHAPTER

*An Act to amend and reenact §§ 45.1-161.64 and 45.1-161.252 of the Code of Virginia, relating to the Coal Mine Safety Act.*

[S 330]

Approved

**Be it enacted by the General Assembly of Virginia:**

**1. That §§ 45.1-161.64 and 45.1-161.252 of the Code of Virginia are amended and reenacted as follows:**

§ 45.1-161.64. Maps of mines required to be made; contents; extension and preservation; use by Department; release; posting of map.

A. Prior to commencing mining activity, the operator of a coal mine, or his agent, shall make, or cause to be made, unless already made and filed, an accurate map of such mine. *Such map shall be submitted to the Chief prior to producing coal at the mine.* All maps shall be presented on the Virginia Coordinate System of 1983, South Zone, unless otherwise approved by the Chief. At intervals not to exceed 12 months and when a coal mine is abandoned, the operator shall submit to the Chief copies of an up-to-date map of the entire mine in an electronic format approved by the Chief. *The operator shall also submit to the Chief revisions that show directional changes whenever mine projections deviate more than 600 feet from the approved mine map.* Only maps in an electronic format will be accepted unless otherwise approved by the Chief. If there are no changes in the information required to be submitted under this section at the time an updated map is due, the operator may submit a notice that there are no changes to the map in lieu of submitting an updated map to the Department.

B. Underground coal mine maps shall show:

1. The active workings;
2. All pillared, worked out, and abandoned areas, except as provided in this section;
3. Entries and aircourses with the quantity of airflow, direction of airflow indicated by arrows, and ventilation controls;
4. Contour lines of all elevations;
5. Dip of the coalbed;
6. Escapeways;
7. The locations that are known or should be known of (i) adjacent mine workings within 1,000 feet, (ii) mines above or below, and (iii) water pools above;
8. Either producing or abandoned oil and gas wells located within 500 feet of such mine and in any underground area of such mine; and
9. Such other information as the Chief may require.

Such map shall identify those areas of the mine which have been pillared, worked out, or abandoned, which are inaccessible, or cannot be entered safely.

C. Additional information required to be shown on underground coal mine maps shall include:

1. Mine name, company name, mine index number, and name of the person responsible for information on the map;
2. The scale and orientation of the map and symbols used on the map;
3. The property or boundary lines of the mine;
4. All known drill holes that penetrate the coalbed being mined;
5. All shaft, slope, drift, and tunnel openings and auger and strip mined areas of the coalbed being mined;
6. The location of all surface mine ventilation fans; the location may be designated on the mine map by symbols;
7. The location of railroad tracks and public highways leading to the mine, and mine buildings of a permanent nature with identifying names shown;
8. The location and description of a least two permanent base line points coordinated with the underground and surface mine traverses, and the location and description of at least two permanent elevation bench marks used in connection with establishing or referencing mine elevation surveys;
9. The location and elevation of any body of water dammed or held back in any portion of the mine; provided, however, such bodies of water may be shown on overlays or tracings attached to the mine maps used to show contour lines as provided under subdivision 12;
10. The elevations of tops and bottoms of shafts and slopes, and the floor at the entrance to drift and tunnel openings;

11. The elevation of the floor at intervals of not more than 200 feet in (i) at least one entry of each working section and main and cross entries; (ii) the last line of open crosscuts of each working section, and main and cross entries before such sections and main and cross entries that are abandoned; and (iii) rooms advancing toward or adjacent to property or boundary lines or adjacent mines; and

12. Contour lines passing through whole number elevations of the coalbed being mined. The spacing of such lines shall not exceed 10-foot elevation levels, except that a broader spacing of contour lines may be approved by the Chief for steeply-pitching coalbeds. Contour lines may be placed on overlays or tracings attached to mine maps.

D. Underground coal mine maps submitted to the Chief shall be on a scale of not less than 100 or more than 500 feet to the inch. Mapping of the underground mine works shall be completed by a closed loop survey method of traversing or other equally accurate methods of traversing. All closed loop surveys shall meet a minimum accuracy standard of one part in 5,000. Elevations shall be tied to either the United States Geological Survey or the United States Coast and Geodetic Survey benchmark system. A registered engineer or licensed land surveyor shall certify that the map of the mine workings is accurate.

E. Underground coal mine maps shall be kept up-to-date by temporary notations and revised and supplemented at intervals not to exceed six months based on a survey made and certified by a registered engineer or licensed land surveyor who has exercised complete direction and control over the work to which it is affixed. Temporary notations shall include:

1. The location of each working face of each working place;
2. Pillars mined or other such second mining;
3. Permanent ventilation controls constructed or removed, such as seals, overcasts, undercasts, regulators, and permanent stoppings, and the direction of air currents indicated; and
4. Escapeways designated by means of symbols.

F. At underground coal mines, an accurate map of the mine showing clearly all avenues of ingress and egress in case of fire shall be posted in a place accessible to all miners.

G. Surface coal mine maps shall show:

1. Name and address of the mine;
2. The property or boundary lines of the active areas of the mine;
3. Contour lines passing through whole number elevations of the coalbed being mined. The spacing of such lines shall not exceed 25-foot elevation levels, except that a broader spacing of contour lines may be approved by the Chief for steeply pitching coalbeds. The Chief may approve alternate means of delineating seam elevations where multiple seams are being mined. Contour lines may be placed on overlays or tracings attached to mine maps;

4. The general elevation of the coalbed or coalbeds being mined, and the general elevation of the surface;

5. Either producing or abandoned oil and gas wells and gas transmission lines located on the mine property;

6. The location and elevation of any body of water dammed or held back in any portion of the mine: provided, however, such bodies of water may be shown on overlays or tracings attached to the mine maps;

7. All prospect drill holes that penetrate the coalbed or coalbeds being mined on the mine property;

8. All auger and surface mined areas of the coalbed or coalbeds being mined on the mine property together with the line of maximum depth of holes drilled during auger mining operations;

9. All worked out and abandoned areas;

10. The location of railroad tracks and public highways leading to the mine, and mine buildings of a permanent nature with identifying names shown;

11. Underground mine workings underlying and within 1,000 feet of the active areas of the mine;

12. The location and description of at least two permanent baseline points, and the location and description of at least two permanent elevation bench marks used in connection with establishing or referencing mine elevation surveys;

13. The scale of the map; and

14. Such other information required by the Chief.

H. Surface coal mine maps shall be kept up to date by temporary notations and revised and supplemented at intervals not to exceed six months based on a survey made and certified by a registered engineer or licensed land surveyor who has exercised complete direction and control over the work to which it is affixed. Temporary notations shall include:

1. The location of each working pit or pits;

2. Auger or highwall miner workings; and

3. Other information that may affect the safety of miners including, but not limited to, updates of gas well or gas line locations.

I. Surface surveys shall originate from at least two permanent survey monuments on the mine property located with a minimum accuracy standard of one part in 10,000. The monuments shall be clearly referenced on the mine map. Elevations shall be tied to either the United States Geological Survey or the United States Coast and Geodetic benchmark system.

J. The original map, or a true copy thereof, shall be left by the operator at the active mine, open at all reasonable times for the examinations and use of the mine inspector.

K. Such maps may be used by the Department for the evaluation of the coal resources of the Commonwealth.

L. The map shall be filed and preserved among the records of the Department and copies of such maps shall be made available at a reasonable cost.

M. Any person who has conducted mining operations or prepared mine maps and who has a map or surveying data of any worked out or abandoned underground coal mine shall on request make such map or data available to the Department to copy or reproduce such material.

§ 45.1-161.252. Employment of authorized persons.

No miner shall be placed in charge of a cutting, loading, drilling, continuous miner, or timbering machine in any mine who is not an authorized person capable of determining the safety of the roof and ribs of the working places. Such miner shall also be capable of detecting the presence of explosive gas and shall be compelled to undergo examination by a mine inspector *or other instructors who are certified by the Board of Coal Mining Examiners and authorized by the Chief* to determine his fitness to detect explosive gas before being permitted to have charge of machines in such mines.