## WEST VIRGINIA CODE: §22A-2-1

§22A-2-1. Supervision by professional engineer or licensed land surveyor; seal and certification; contents; extensions; repository; availability; traversing; copies; archive; final survey and map; penalties.

The mapping of all coal mines shall be supervised by a competent engineer or land surveyor. The work of such engineer or land surveyor shall be supervised by either a civil engineer or a mining engineer certified by the board of registration for professional engineers, which exists by authority of section four, article thirteen, chapter thirty of this code, or a licensed land surveyor approved by the Board of Examiners of Land Surveyors as provided by section three, article thirteen-a of said chapter. To each map supervised by the engineer or land surveyor there shall be affixed thereto the seal of a certified or professional engineer or licensed land surveyor, which shall be identical to the design authorized by the Board of Registration for Professional Engineers, as provided in section sixteen, article thirteen of said chapter or Board of Examiners of Land Surveyors as provided by section eleven, article thirteen-a of said chapter. Every map certified shall have the professional engineer's or land surveyor's signature and certificate, in addition to his or her seal, in the following form:

"I, the undersigned, hereby certify that this map is correct and shows all the information, to the best of my knowledge and belief, required by the laws of this state, and covers the period ending
P. E.
(Either Civil or Mining Engineer
or Land Surveyor)."
The operator of every underground coal mine shall make, or cause to be made, an accurate map of such mine, on a scale of not less than one hundred, and not more than five hundred feet to the inch. The map of such mine shall show:

- (1) Name and address of the mine;
- (2) The scale and orientation of the map;
- (3) The property or boundary lines of the mine;
- (4) The shafts, slopes, drifts, tunnels, entries, rooms, crosscuts and all other excavations and auger and strip mined areas of the coalbed being mined;
- (5) All drill holes that penetrate the coalbed being mined;
- (6) Dip of the coalbed;

- (7) The outcrop of the coalbed within the bounds of the property assigned to the mine;
- (8) The elevations of tops and bottoms of shafts and slopes, and the floor at the entrance to drift and tunnel openings;
- (9) The elevation of the floor at intervals of not more than two hundred feet in:
- (a) At least one entry of each working section, and main and cross entries;
- (b) The last line of open crosscuts of each working section and main and cross entries before such sections and main and cross entries are abandoned; and
- (c) Rooms advancing toward or adjacent to property or boundary lines or adjacent mines;
- (10) Contour lines passing through whole number elevations of the coalbed being mined, the spacing of such lines not to exceed ten-foot elevation levels, except that a broader spacing of contour lines may be approved for steeply pitching coalbeds by the person authorized so to do under the federal act; and contour lines may be placed on overlays or tracings attached to mine maps;
- (11) As far as practicable the outline of existing and extracted pillars;
- (12) Entries and air courses with the direction of airflow indicated by arrows;
- (13) The location of all surface mine ventilation fans, which location may be designated on the mine map by symbols;
- (14) Escapeways;
- (15) The known underground workings in the same coalbed on the adjoining properties within one thousand feet of such mine workings and projections;
- (16) The location of any body of water dammed in the mine or held back in any portion of the mine, but 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 (10) of this section;
- (17) The elevation of any body of water dammed in the mine or held back in any portion of the mine;
- (18) The abandoned portion or portions of the mine;
- (19) The location and description of at 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;
- (20) Mines above or below;

- (21) Water pools above;
- (22) The location of the principal streams and bodies of water on the surface;
- (23) Either producing or abandoned oil and gas wells located within five hundred feet of such mine and any underground area of such mine;
- (24) The location of all high pressure pipelines, high voltage power lines and principal roads;
- (25) The location of railroad tracks and public highways leading to the mine and mine buildings of a permanent nature with identifying names shown;
- (26) Where the overburden is less than one hundred feet, occupied dwellings; and
- (27) Such other information as may be required under the federal act or by the Office of Miners' Health, Safety and Training.

The operator of every underground coal mine shall extend, or cause to be extended, on or before March 1 and on or before September 1, of each year, such mine map thereof to accurately show the progress of the workings as of July 1, and January 1, of each year. Such map shall be kept up to date by temporary notations, which 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.

Such map shall be revised and supplemented at intervals prescribed under the federal act on the basis of a survey made or certified by such engineer or surveyor, and shall be kept by the operator in a fireproof repository located in an area on the surface chosen by the operator to minimize the danger of destruction by fire or other hazard.

Such map and any revision and supplement thereof shall be available for inspection by a federal mine inspector, by mine health and safety instructors, by miners in the mine and their representatives and by operators of adjacent coal mines and by persons owning, leasing or residing on surface areas of such mines or areas adjacent to such mines, and a copy of such map and any revision and supplement thereof shall be promptly filed with the office of miners' health, safety and training. The operator shall also furnish to persons expressly entitled thereto under the federal act, upon request, one or more copies of such maps and any revision and supplement thereof. Such map or revision and supplement thereof shall be kept confidential and its contents shall not be divulged to any other person,

except to the extent necessary to carry out the provisions of the federal act and this chapter and in connection with the functions and responsibilities of the secretary of housing and urban development.

Surveying calculations and mapping of underground coal mines which were or are opened or reopened after July 1, 1969, shall be done by the rectangular coordinate traversing method and meridians carried through and tied between at least two parallel entries of each development panel and panels or workings adjacent to mine boundaries or abandoned workings. These surveys shall originate from at least three permanent survey monuments on the surface of the mine property. The monuments shall be clearly referenced and described in the operator's records. Elevations shall be tied to either the United States geological survey or the United States coast and geodetic survey bench mark system, be clearly referenced and described on such map.

Underground coal mines operating on July 1, 1969, and not using the rectangular coordinate traversing method shall, within two years of such date, convert to this procedure for surveying calculations and mapping. Meridians shall be carried through and tied between at least two parallel entries of each development panel and panels or workings adjacent to mine boundaries or abandoned workings. These surveys shall originate from at least three permanent survey monuments on the surface of the mine property. The monuments shall be clearly referenced and described in the coal mine operator's records. Elevations shall be tied to either the United States geological survey or the United States coast and geodetic survey bench mark system, be clearly referenced and described on such map.

The operator of such underground coal mine shall, by reasonable proof, demonstrate to the director or to any federal mine inspector concerned, at any time, that a diligent search was made for all existing and available maps and survey data for the workings on the adjoining properties. The operator shall further be able to show proof to the director or to any federal mine inspector concerned, that a suitable method was used to insure accuracy in the methods used in transposing other workings to the map of such mine.

There shall be an archive of underground coal mine maps maintained at the office of the director. The archive shall:

- (1) Be secured in a fireproof and burglarproof vault;
- (2) Have an appropriate map identification system; and
- (3) Have adequate map microfilming facilities.

Whenever an operator permanently closes or abandons an underground coal mine, or temporarily closes an underground coal mine for a period of more than ninety days, he or she shall promptly notify the office of miners' health, safety and training and the federal mine inspector of the district in which such mine is located of such closure. Within sixty days of the permanent closure or abandonment of an underground coal mine, or, when an

underground coal mine is temporarily closed, upon the expiration of a period of ninety days from the date of closure, the operator shall file with the office of miners' health, safety and training and such federal mine inspector a copy of the mine map revised and supplemented to the date of the closure. Such copy of the mine map shall be certified by a certified or professional engineer or licensed surveyor as aforesaid and shall be available for public inspection.

Any person having a map or surveying data of any worked out or abandoned underground coal mine shall make such map or data available to the Office of Miners' Health, Safety and Training to copy or reproduce such material.

Any person who fails or refuses to discharge any duty imposed upon him or her by this section is guilty of a misdemeanor, and, upon conviction thereof, shall be fined not less than \$500 nor more than \$1,000.