456.11 Maps — surveys.

The operator of any underground mine shall comply with the following provisions relative to maps and surveys:

1. *Scale*. Each mine map shall be drawn to a scale of not more than two hundred feet to the inch.

2. *General specifications*. Each map shall show the name of the state, county, and township in which the mine is located, the designation of the mine, the name of the company or operator, the certificate of the mining engineer or surveyor as to the accuracy and date of the survey, the north point, and the scale to which the map is drawn.

3. Boundaries and surface lines. Every map shall correctly show the surface boundary lines of the mineral rights pertaining to each mine and all section or quarter section lines or corners within the same, the lines of town lots and streets, the tracks and sidetracks of all railroads, the location of all wagon roads, rivers, streams, and ponds, and reservations made of the mineral.

4. Underground conditions. For the underground workings, the map shall show all shafts, slopes, tunnels, or other openings to the surface or to the workings of a contiguous mine; all excavations, entries, rooms, and crosscuts; the location of the escape ways, and of the fan or furnace or other means of ventilation and the direction of air currents, and the location of permanent pumps, hauling engines, engine planes, abandoned works, fire walls, and standing water.

5. Separate maps. A separate and similar map drawn to the same scale in all cases shall be made of each layer of minerals mined in any mine in this state. A separate map shall also be made of the surface whenever the surface buildings, lines, or objects are so numerous as to obscure the details of the mine workings if drawn upon the same sheet with them, and in such case the surface map shall be drawn upon transparent cloth or paper so that it can be laid upon the map of the underground workings and thus truly indicate the local relation of lines and objects on the surface to the excavations of the mine and any other principal workings of the mine.

6. *Rise and dip of minerals.* Each map of underground workings shall also show by profile drawing and measurement, the last one hundred fifty feet approaching the boundary lines, showing the rise and dip of the minerals.

7. *Copies.* The original or true copies of the maps shall be kept at the office of the mine, and true copies thereof shall also be furnished the state geologist within thirty days after the completion of the same.

8. *Extensions*. An accurate extension of the last preceding survey of every mine in active operation shall be made once in every twelve months prior to July 1 of every year and the result of such survey, with the date thereof, shall be promptly and accurately entered upon the original map, and a true, correct, and accurate copy of the extended map shall be forwarded to the state geologist so as to show all changes in plan of new work in the mine, and all extensions of the old workings to the most advanced face or boundary of the workings which have been made since the last preceding survey, and the parts of the mine abandoned or worked out after the last preceding survey shall be clearly indicated and shown by colorings, which copy must be delivered to the state geologist within thirty days after the last survey is made.

9. Abandoned mine. When any underground mine is worked out or is about to be abandoned or indefinitely closed, the operator of the same shall make or cause to be made a completed and extended map of the mine and the result of the same shall be duly extended on all maps of the mine and copies thereof so as to show all excavations and the most advanced workings of the mine, and their exact relation to the boundary or section lines on the surface, and deliver to the state geologist a copy of the completed map.

10. Copies furnished. The state geologist shall provide the division of soil conservation and water quality created within the department of agriculture and land stewardship pursuant

to section 159.5 a copy of each map and map extension received by the geologist under this section.

[C97, §2485; S13, §2485, 2496-m; C24, 27, 31, 35, 39, §**1245, 1351 – 1355, 1357, 1358;** C46, 50, 54, 58, 62, 66, 71, 73, §82.28, 83.14 – 83.18, 83.20, 83.21; C75, 77, 79, 81, §305.12] C93, §460A.12 2002 Acts, 2nd Ex, ch 1003, §260, 262 C2003, §456.11 2015 Acts, ch 103, §44 Referred to in §456.13