

ILLUMINATING OILS.

CHAPTER 90.

[S. B. 139.]

INSPECTION OF ILLUMINATING OILS.

AN ACT to Amend Section 1760 of the Revised Codes, Relating to the Inspection of Illuminating Oils.

Be it Enacted by the Legislative Assembly of the State of North Dakota:

That section 1760 of the Revised Codes be and the same is hereby amended to read as follows:

§ 1760. PETROLEUM OIL—HOW TESTED.] That all mineral or petroleum oil, or any fluid or substance which is a product of petroleum, or into which petroleum or any product of petroleum enters or is found as a constituent element, whether manufactured within this state or not, shall be inspected as herein provided before being offered for sale or sold for consumption for illuminating purposes within this state. Such inspection shall be conducted in the following manner: The test shall be made in a test cup of metal or glass, cylindrical in shape, two and a quarter inches in diameter, and four inches deep, both measurements being made inside the cup, and this cup shall be filled to within one-quarter of an inch of the brim with the oil or other substance to be tested, taken at the ordinary temperature; the cup shall be placed in a water bath sufficiently large to leave a clear space of one inch under the cup, and three-eighths of an inch around it, and in such manner as to project about one-quarter of an inch above the water bath; the space between the cup and the water bath shall be nearly filled with cold water taken at the ordinary temperature and the cup being placed in the water bath, the latter shall be heated by an alcohol lamp with its flame so graduated that the rising temperature from 60 degrees Fahrenheit to the highest heat test temperature shall not be less than 2 degrees per minute, and shall be as near 2 degrees per minute as is practicable, and shall in no case exceed 4 degrees per minute. A Fahrenheit thermometer shall be suspended in such a manner that the upper surface of its bulb shall be as near as practicable one-quarter of an inch below the surface of the oil undergoing test; as soon as the temperature reaches the point of 98 degrees the lamp shall be removed from under the water bath, and the oil shall then be allowed to rise to a temperature of 100 degrees Fahrenheit, by the residual heat of the water, and at that point

the first test for flash shall be made as follows: A taper, hereinafter described, shall be lighted and the surface of the oil shall be touched with the flame of the taper, either to the center of the oil surface or to any or all parts of it, but the taper itself shall not be plunged into the oil, and if no flash takes place upon the first contact of the flame with the oil, the taper shall not be held in longer contact, but shall be immediately withdrawn; if no flash takes place at a temperature of 100 degrees the lamp shall be replaced under the water bath, and the temperature raised to 103 degrees Fahrenheit, when the lamp shall be again withdrawn and the oil allowed to rise to 105 degrees by the residual heat of the water, when the test shall be made at 105 degrees by again applying the flame of the taper as hereinbefore specified; if no flash occurs, the test shall be repeated as often as the oil gains 5 degrees in temperature, three degrees with the lamp under the water bath, and two degrees with the lamp removed. These tests shall be repeated until a flash is obtained. The inspector shall further test the oil by applying the taper at every 2 degrees rise, without removing the lamp or stirring, but if a flash is obtained by this means by a less rise of temperature than the 5 degrees herein required he shall at once remove the lamp, stir the oil, and immediately apply the flame. The taper used for testing may be made of any wood giving a clear flame, and it shall be made as slender as possible and with a tip not more than one-sixteenth of an inch in thickness. No taper or match with sulphur upon it shall be used unless the sulphur is removed before lighting. When the taper is lighted it shall be applied to the oil immediately, that is to say, before an ash or coal has had time to form on the end of the taper beyond the flame, and in applying the taper the flame shall be made to touch the oil, but the taper itself shall not be brought in contact with the oil; and if the taper is so brought in contact with the oil, but not held there longer than for the space of one second, and the oil flashes, the test shall not thereby be vitiated, but the inspector shall immediately remove the lamp and again test the oil by the flame without allowing the body of the taper to touch the oil. For the purpose of making such test, the inspector may use any commercial testor approved by the State Oil Inspector which substantially complies with the foregoing provisions and requires the use of not less than one-half pint of the fluid to be tested, but the manner of making the test must conform strictly to the requirements of this section. No oil or other substance, which by the test herein described flashes at any temperature below 120 degrees Fahrenheit shall be approved or sold or offered for sale for illuminating purposes within this state.

Approved March 18th, 1897.