

found at page 513, Opinions of the Attorney-General, 1919. This opinion held that where the permanent statutes provided a certain salary and the appropriation bill provided a greater salary, the appropriation bill did not by implication repeal the provisions of the permanent statute. However, where the duties have been provided by statute, as in the case before us, and followed by such a provision of the appropriation bill, it seems clear that the legislature provided and fixed the salary of said librarian for the biennial period, as above stated. If it were not for this provision, it is believed there would be no authority to pay said salary at all.

In specific reply to your inquiry, it is the opinion of this department that:

(1) The state library board has no authority to fix the salary of the state librarian and he cannot legally receive any salary except as provided by the legislature.

(2) In the existing permanent statutes the legislature failed to provide a salary for the state librarian. However, in the appropriation bill for the biennial period beginning July 1, 1921 (109 O. L. 467), the legislature did fix and provide for said salary for the period of two years at three thousand dollars per year, and there is no legal authority for the payment of any greater amount.

Respectfully,

JOHN G. PRICE,

Attorney-General.

2726.

MINES AND MINING—USE OF ALTERNATING CURRENT AT MINES—
HOW LIMITED—PUMPS AND OTHER MINING MACHINERY USED
IN AND ABOUT WORKING PLACES OF MINE REQUIRED TO BE
OPERATED BY DIRECT CURRENT.

1. *Under the provisions of section 948 G. C. the use of alternating current at mines equipped with electric power, is limited to the purpose of converting alternating current to direct current and such use is subject to the approval of the chief and district mine inspectors.*

2. *Pumps and other mining machinery used in and about the working places of the mine, may not be operated by alternating current, but are required by the provisions of section 948 G. C. to be operated by direct current, not exceeding in pressure or potential three hundred and twenty-five volts as shown at the nearest switchboard.*

COLUMBUS, OHIO, December 21, 1921.

Department of Industrial Relations, Columbus, Ohio.

GENTLEMEN:—Your letter of recent date has been received, reading as follows:

"I am transmitting herewith a communication directed to me under date of November 9th by Mr. William Robinett, chief of the division of mines, in which he requests that the subject matter embodied therein be referred to the Attorney-General for an opinion.

I may add that I believe the view taken by the chief of the division of mines, relative to the use of alternating currents in mines is the correct one. I feel that you should have my judgment in the matter,

in the transmitting of attached communication and requesting of your opinion.”

The letter of Mr. William Robinett, chief of the division of mines, which you enclosed with your communication, reads as follows :

“There has been considerable controversy over the amended section 948 of the General Code, relative to the use of alternating current in mines. Section 948, paragraph 3, reads as follows :

‘At each mine equipped with electric power, alternating current may be used to convert alternating current to direct current, and to operate motors permanently installed above ground and in underground substations, or buildings especially prepared for them, in a manner subject to the approval of the chief and district mine inspectors, but no wires carrying alternating current shall be used underground except same be carried in an entry or passageway where persons and animals are not permitted to travel.’

There is a specific case before this division at this time, where a company has recently installed alternating current inside its mine for the operation of pumps, and upon being ordered to discontinue its use, contends that it is complying with the law by installing pumps in buildings especially prepared for them, in a manner subject to the approval of the chief and district mine inspector.’

It is our opinion that alternating current cannot legally be used for operating any machinery in a mine except the machinery necessary to convert the alternating current to direct current. As there is no reference made in the act to the pressure, potential or voltage of A. C. that may be used for pumps or other machinery in a mine, but does in the paragraph following the one quoted above make reference to the potential or voltage of direct current that may be used to operate pumps and other machinery.

If it was the intention when this act was written to permit the use of alternating current to be used in a mine for the purpose of operating pumps and other machinery, it seems to us that some reference should have been made as to the amount of current to be used. There does not seem to be anything in the paragraph above quoted to justify this department sanctioning the use of alternating current. Therefore, under the circumstances, we request that the matter be referred to the Attorney-General and the request made for him to render his opinion in the case.”

Section 948 G. C. chiefly pertains to the questions raised in your inquiry. The section reads as follows :

“The owner, lessee or agent of a mine at which electricity with a pressure or potential of more than three hundred and twenty-five volts, or alternating current, is used, shall, in addition to the provisions of the preceding section, observe the following :

At each mine equipped with electric power after the passage and approval of this act, the current used to operate gathering locomotives, mining machines, shearing machines, drills and other machinery used in or about the working places of the mine, shall not exceed in pressure or potential, three hundred and twenty-five volts, direct current,

as shown at the nearest switchboard, and the wires conducting the power from the nearest switchboard shall not carry a higher pressure or potential.

At each mine equipped with electric power alternating current may be used to convert alternating current to direct current, and to operate motors permanently installed above ground and in underground substations, or buildings especially prepared for them, in a manner subject to the approval of the chief and district mine inspectors, but no wires carrying alternating current shall be used underground except same be carried in an entry or passageway where persons and animals are not permitted to travel.

At each mine equipped with electric power after the passage and approval of this act, when the current used to operate haulage locomotives, pumps and other machinery not located in or about the working places of the mine, is of a pressure or potential in excess of three hundred and twenty-five volts, direct current, the entry or passageway where such wires are carried shall not be designated or permitted to be used as the principal traveling way, and when designated or used as the escapement way, the wires shall be protected so that persons required to travel near same in emergencies will not inadvertently come in contact therewith. No pressure in excess of six hundred and fifty volts at the switchboard shall be used underground.

At each mine equipped with electric power prior to the passage and approval of this act, where the pressure or potential is in excess of three hundred and twenty-five volts, direct current, or where alternating current is used, and the conditions surrounding the use of same are such, in the opinion of the chief inspector of mines, that the provisions of the preceding section do not provide the required protection from shock to persons employed therein, such additional safeguards shall be employed as may be required by the chief inspector of mines and the district inspector of mines jointly."

The second paragraph of the section cited clearly indicates that after the passage and approval of amended section 948 (the section quoted supra), the current used to operate mining machinery in or about the working places of the mine, shall be "direct" and not exceeding in pressure or potential, three hundred and twenty-five volts, as shown at the nearest switchboard.

Paragraph 3 immediately following provides that:

"Alternating current may be used to convert alternating current to direct current, and to operate motors permanently installed above ground, and in underground substations, or buildings especially prepared for them, subject to the approval of the chief and district mine inspectors," etc.

It is not thought that the phrase "and to operate motors permanently installed above ground and in underground substations" was used with the view of establishing or authorizing a new or different use from that initially stated in the opening words of the paragraph, and which is, the transforming or converting of alternating current to direct current. On the other hand, it is thought that the use of the motors contemplated is rather such as is required for the process of conversion of the alternating to direct current, and that the stations or buildings containing the motors to be used for this purpose, are

to be permanently built, either above ground or in underground substations.

It would seem then, this paragraph indicates that the use of alternating current in mines equipped with electric power, is limited to the use of the motors and machinery required in its transformation from alternating to direct current, since otherwise it would become apparent that motors propelled generally for other purposes, could themselves in turn be connected with other machinery about the mine, which would in the end become such an operation involving the use of alternating current, as to totally destroy the cogency and power of paragraph 2, which provides that such mining machinery shall be operated only by direct current. Thus it would seem that the use of alternating current is limited to one purpose, and that such use and purpose, as well as the buildings wherein the conversion is consummated, is subject to the approval of the chief and district mine inspectors. Reference is made to that portion of your inquiry wherein statement is made that a certain company has recently installed alternating current inside its mines for operation of pumps, and upon being ordered to discontinue its use, contends that it is complying with the law by installing pumps in "buildings especially prepared for them in a manner subject to the approval of the chief and district mine inspectors." Such a contention cannot be thought to be given serious consideration in view of the fact that the word "pump" is not the word used in the language of the statute making such provision, while the word "motors" is the one so used, and it is not thought practicable or reasonable to designate a pump as a motor, or so construe the meaning of the words, as to render them synonymous.

In conclusion it may be said that while a technical discussion of the terms "direct" and "alternating" currents may not be attempted, it is believed and thought to be generally understood that certain scientific properties of the latter render its use attendant with danger, requiring great care and precaution in its handling and application, and for which reason it is thought the safeguarding of its use is primarily provided for by the provisions of section 948 G. C.

In specific answer, therefore, to your questions, you are advised:

1. Under the provisions of section 948 G. C. the use of alternating current in and about mines is limited to the purpose of converting alternating current to direct current, and such use is subject to the approval of the chief and district mine inspectors.

2. Pumps and other mining machinery used in and about the working places of the mine may not be operated by alternating current, but are required by the provisions of section 948 G. C. to be operated by direct current, not exceeding in pressure or potential three hundred and twenty-five volts, as shown at the nearest switchboard.

Respectfully,
JOHN G. PRICE,
Attorney-General.