

"PIONEER" MINERAL RUBBER PIPE COATING

USED ON STEEL PIPE LINES IN THE
CITY OF TORONTO, CAN.



The Canadian Mineral Rubber Co., Ltd.
1 Toronto Street, Toronto, Ontario

U. S. A. OFFICES:
The American Asphaltum & Rubber Co.
Harvester Building, Chicago

City Engineer's Office
Toronto

November 16, 1904.

The Railway & Shipping World,
33 Melinda Street, City.

Gentlemen:

The following are the facts in connection with the rubber coating used on the six-foot steel conduit:

"The large steel conduit pipes, six feet in diameter, and a length of about 5000 feet to be laid across Toronto Island by the Toronto Water Works were coated entirely with Mineral Rubber Pipe Coating supplied by The American Asphaltum & Rubber Co., of Chicago, to specifications of City Engineer Rust, who decided in favor of this material after careful investigation into its record, particularly at Minneapolis, where it was used on the pipe line eight years ago, and is today, according to Engineer Cappelen, of that city, as good as the day it was put on."

Yours truly,

(Signed) C. H. Rust,
City Engineer.

The American Asphaltum & Rubber Co.

MANUFACTURERS OF

HIGH-GRADE ASPHALTS

99.5% PURE

General Offices

600-614 Harvester Building
CHICAGO

April 15, 1910.

Re. "Pioneer" Mineral Rubber Pipe Coating.

C. H. Rust, Esq.,
City Engineer,
Toronto, Can.

Dear Mr. Rust:

I understand that a short time since you had occasion to examine the steel pipe line furnished the City of Toronto some years ago by Jas. McNeil & Bro., Pittsburg, and which pipe they coated with our "PIONEER" MINERAL RUBBER PIPE COATING. Will you not kindly advise across this, the condition of the pipe and coating at the date of the examination referred to?

We appreciate your selection of "Pioneer" Pipe Coating for the 3500 ft. of 60 in. steel pipe for the City of Toronto for which you recently awarded contract to the Canada Foundry Co., Toronto, and assure you that it will be in all respects the same as the coating used in your other pipe line above referred to, and we will render the Foundry Co. all the assistance we can towards making a first-class job, in which case the pipe will undoubtedly be in A1 condition for many years.

Trusting we may hear from you at your early convenience, we are

Yours very truly,

(Signed) A. J. Hill,
Sales Manager

When examined over two years ago after being dipped and carried the City's supply about for the same time, it was found to be in good condition and quite satisfactory.

(Signed) C. H. Rust,
City Engineer,

Toronto, Can.

April 19, 1910

Specification for Coating Steel Pipe

Each section of pipe after all caulking has been completed and tested and all grease, dirt, loose scale and rust removed, shall be heated to about 300° F. by a method which will not injure it and then dipped vertically in a hot bath of "PIONEER" MINERAL RUBBER PIPE COATING (manufactured by The Canadian Mineral Rubber Co., Ltd. of Toronto, Can.) or a Coating material equal thereto, the Coating being maintained at a temperature of between 400° and 425° F. The pipe must remain in the bath a sufficient length of time to attain the full temperature of the Coating material and then raised from the bath just sufficiently fast enough to allow the Coating to solidify evenly over the surface of pipe. It is advisable to avoid any direct currents of air striking the pipe in the course of withdrawing same from the molten bath and in this way prevent an uneven coating. Coating must not be "flashed", must be durable, smooth, glossy, hard and strongly adhesive to the metal. The pipe must be thoroughly coated and the utmost care exercised after it has been applied, to avoid any injury to the surface while being handled in transportation and in the trench; any injury to the Coating in transportation or hauling must be repaired in the field by the use of the same material, applied hot in the field with ordinary paint brushes, or "PIONEER" MINERAL RUBBER FIELD PAINT (to be applied cold and to be made of the same basic materials as the Pipe Coating material) produced by the same Company. It may be necessary from time to time to temper the Pipe Coating material with a "flux" manufactured by the same Company.

The Engineer must be satisfied that the Pipe Coating to be used will be supplied by a Company who can show that they have been manufacturing it for at least the past ten years, and that it has been successfully used during that time and is made by the same processes, formulae, and materials from which the Pipe Coating used upon the Minneapolis, Minn., Pipe Line in 1896 was made.

The Chemical Analysis of the Pipe Coating shall be approximately as follows:

Pipe Coating shall be uniform, homogeneous, free from water, insoluble salts or any other impurities.

Specific Gravity (by suspension in water method) shall not be more than one (1).

It shall contain at least 99% Bitumen, soluble in cold Carbon Di Sulphide.

It shall contain Petrolene, soluble in Petrolic Ether to the extent of between 60% and 68%.

The melting point shall be not lower than 235° F. (Per test recommended by Am. Soc. C. E.)

It shall contain not more than 12% of fixed Carbon (Per test recommended by Am. Soc. of Testing Materials).

It shall contain not over 1 per cent of Free Carbon.

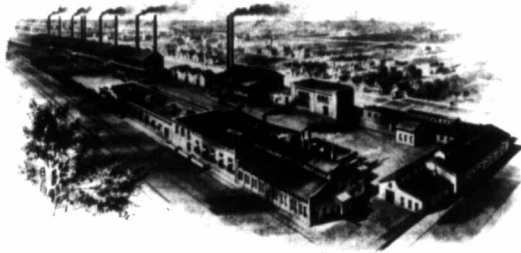
Penetration by Dow Standard will not vary more than five (5) points from the following:—

No. 2 N. 5 sec. 100 gms.	77° F.	-----25
No. 2 N. 1 min. 200 gms.	32° F.	-----10
No. 2 N. 5 sec. 50 gms.	115° F.	-----40

Evaporation Test:—20 gms. of the Compound when heated 5 hours in a flat bottom dish 2½ inches in dia. 1 inch high in a regulated oven having a temperature of 205° C. shall not lose over 3½%.

With a view of determining whether the Coating material will withstand the action of the alkali and acid salts found in the earth the following test is recommended:—

Immerse a cubic inch of the Pipe Coating for twenty-four (24) hours in a fifty per cent ammonium solution or 35% Hydro-Chloric acid solution. The material must show no effects from the immersion and the solution must not be discolored.



Bird's-Eye View of Our Manufacturing Plant

Our Products:

Paints

Roofing Pitch or Asphalt

Ready Roofing

Waterproofing Asphalt

Paving Cement

Asphalt Floor Mastic

Insulation Paint

Anti-Acid Compounds

Mineral Rubber

"Pioneer" Filler Asphalt for Brick

Floors and Pavements

"Pioneer" Mineral Rubber Pipe Coating

"Pioneer" Road Asphalt

R. R. Bridge Floor Waterproofing

High Grade Asphalts