

Questions

Rouyn-Noranda and Montreal and, if so, will the change allow travellers to make these trips, in either direction, at night?

[Translation]

Answer: The management of Canadian National Railways advises as follows:

The design of train schedules, of necessity, must also take into account the requirements of mail and express. As there is insufficient traffic volume to justify separate services for these needs in this particular area, no change in schedules is contemplated at the present time.

[Text]

ABANDONMENT OF C.N.R. LINE, FREDERICTON-CENTREVILLE, N.B.

Question No. 1,028—Mr. MacRae:

1. Have any surveys been made by Canadian National Railways concerning their line between Fredericton and Centreville, New Brunswick, with a view to requesting abandonment of said line and, if so, what was the result of such survey?

2. Is it the intention of Canadian National Railways to seek permission to abandon the Canadian National Railway line between Fredericton and Centreville, New Brunswick?

Mr. Pickersgill: The management of Canadian National Railways advises as follows:

1 and 2. It is management's understanding that present plans for construction of the Mactaquac power development call for flooding of a portion of this line. This matter is the subject of negotiations between the parties involved.

LAND EXPROPRIATIONS, NATIONAL CAPITAL COMMISSION, OTTAWA

Question No. 1,043—Mr. Richard:

Does the national capital commission plan to expropriate property in the New Edinburgh area of the city of Ottawa subsequent to the forthcoming removal of the C.P.R. spur line between Beechwood avenue and Sussex drive and in connection with the proposed extension of the N.C.C. driveway along the Rideau river and, if so, what properties are involved and how soon after the track removal would expropriation notices be sent out to the property owners involved?

Answer: The national capital commission has no plans at present to expropriate property in the New Edinburgh area of the city of Ottawa subsequent to the removal of the C.P.R. spur line between Beechwood avenue and Sussex drive.

AIR POLLUTION RESEARCH

Question No. 1,065—Mr. Howe (Wellington-Huron):

1. Is the Department of National Health and Welfare conducting a program of research on air pollution and, if so, what have been the findings of this program as to its cause in connection with (a) the motor car, the truck and the bus (b) industrial and commercial enterprise (c) nuclear fall-out?

2. Have any conclusions been arrived at as to methods of control?

3. How much has this program cost to date?

[Mr. Laprise.]

Miss LaMarsh: 1. Yes.

(a) Motor car. The principal cause of air pollution from the motor car is the emission of unburned fuel or hydrocarbons, carbon monoxide, carbon dioxide, oxides of nitrogen, sulphur dioxide, organic compounds such as aldehydes, acids, alcohols, esters, phenols, carcinogens and others, smoke and particulate matter, including lead.

Truck and bus. Similar to above for those operating on gasoline. Diesel engines produce much lower or negligible concentrations of carbon monoxide for all operating conditions; except acceleration or other heavy load conditions. However diesel emissions of hydrocarbons and oxides of nitrogen, expressed in lbs. per hour, are greater in all cases than the values for gasoline engines. Odour and irritation of diesel exhaust are due principally to the content of aldehydes.

(b) Industrial and commercial enterprises. Causes of air pollution from this source are many and varied, depending upon the nature of the enterprise. Combustion products of solid fuels may pollute the air with smoke, fly ash up to 10 per cent of the fuel used, sulphur oxides, oxides of nitrogen, hydrocarbons, organic acids and aldehydes and many other products. Liquid fuels in combustion contribute very much less ash, but similar quantities of sulphur oxides, depending upon the sulphur content of the fuel, and products similar to those mentioned above. Gaseous fuels contain no ash or sulphur and produce the least quantity of contaminants during combustion.

Some of the major contaminants from industrial enterprises are sulphur dioxide from smelting of sulphide concentrates; odorous sulphur compounds from pulp and paper mills; fluorides from aluminium refining and phosphate fertilizer production; sulphur dioxide, other odorous sulphur compounds, hydrocarbons and catalyst dust from oil refining; arsenic from roasting of arsenical gold ores; oxides of nitrogen and ammonia from manufacture of nitric acid and nitration products; chlorine from electrolysis of salt; lead from battery plants and smelters; zinc from metallurgical plants; iron oxide dust and sulphur dioxide from iron and steel manufacturing; dust from cement manufacture and other crushing, grinding and sintering or roasting operations. Almost every industrial process gives rise to air contamination of one form or another.

(c) Nuclear fall-out. As part of its comprehensive radioactive fall-out study program, the Department of National Health and Welfare has, with the co-operation of the meteorological services branch of the Department of Transport, established a program