

ITEM 3
MANAGER'S REPORT NO. 40
COUNCIL MEETING 1981 09 08

Re: IN-DEPTH HAZARDOUS MATERIALS SEMINAR
DENVER, COLORADO
1981 NOVEMBER 09-20

MUNICIPAL MANAGER'S RECOMMENDATION:

1. *THAT the recommendation of the Medical Health Officer be adopted.*

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TO: MUNICIPAL MANAGER 1981 08 28
FROM: MEDICAL HEALTH OFFICER
SUBJECT: IN-DEPTH HAZARDOUS MATERIALS SEMINAR
DENVER, COLORADO ON 1981 NOVEMBER 9-20

RECOMMENDATIONS:

1. THAT Council approve the attendance of the Chief Public Health Inspector at the two week in-depth Hazardous Materials Seminar, at Denver, Colorado, 1981 November 9-20.

REPORT:

The Environmental Health Division is responsible for responding to spills or discharges of hazardous materials. The role of this division as outlined in the Burnaby Emergency Response Plan is attached.

By the nature of industry within this Municipality and location of rail lines, arterial roads, freeways etc., there occurs a continual transferring of hazardous materials and the chance of accidental spills or discharges.

The Environmental Health Division must receive update training in the area of hazardous materials in order to effectively respond to spills or discharges of petroleum products, chemicals, industrial wastes, etc.

A two week in-depth training course in Denver, Colorado is available which provides participants with valuable demonstrations and hands-on workshops in the following areas:

INDUSTRIAL CHEMICALS - A look at the most commonly shipped industrial chemicals, how they are shipped and how they should be handled in an incident.

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ACIDS/ALKALIES

The characteristics of most common acids and alkalies are discussed, including their reactions and the proper response necessary in an incident.

EXPLOSIVES

A brief history of explosives precedes a discussion of the various types of explosives and effective methods of handling them in emergencies.

ELECTRICAL HAZARDS

Electrical hazards pose serious threats and should not be overlooked. What they are and how to deal with them will be discussed.

PIPELINE TRANSPORTATION

Distribution and high pressure lines are covered, along with what can and has happened in pipeline emergencies and how they were handled.

SPECIFICATION CONTAINERS

Proper containers vary with the commodities being transported. Discussion focuses on determining appropriate containers.

CARGO TANKS

Various cargo tanks and the commodities they transport are reviewed in conjunction with emergency procedures in an incident.

PETROLEUM SPILLS

Students learn how to place booms to effectively contain a petroleum spill in a hands-on workshop in the South Platte river.

COMPRESSED GAS, FLAMMABLE AND COMBUSTIBLE LIQUIDS

Discussion includes how to load and off-load rail and tank vehicles, and response procedures for accidents.

ORGANIC PEROXIDES

The nature of organic peroxides and the appropriate safety measures in an incident are thoroughly addressed.

PESTICIDES

Information presented on pesticides and patching small containers is followed by an exercise in cleaning up a simulated spill outside.

CRYOGENICS

Various types of cryogenics and how they react are shown in the classroom. Past accidents and the problems encountered are also discussed.

POISON GAS

Commercial and military gasses are discussed and compared. Proper response to emergency situations is emphasized.

CHLORINE AND CHLORINE COMPOUNDS

An informational discussion is followed by student application of chlorine kits to cylinders.

ANHYDROUS AMMONIA

The uses of anhydrous ammonia, methods of application, safety precautions and emergency procedures are discussed.

RADIOACTIVE MATERIALS

Valuable information presented on radioactive materials includes using various survey instruments to locate a hidden radioactive source.

PROTECTIVE EQUIPMENT

After a discussion of the equipment which is available, students put on self-contained breathing apparatus, acid suits and other protective equipment.

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RAIL TANK INCIDENTS

Realistic, typical problems are demonstrated on a rail tank donated by the Burlington-Northern Railroad and solutions are given.

CONTAINMENT

A full day is devoted to containment of hazardous materials. Students patching and plugging 55 gallon barrels and rail tank cars will find containment is limited only by their imagination.

CONTINGENCY PLANNING

Students learn how to plan for the inevitable.

EVACUATION

Discussion will focus on how and when to evacuate, and the special problems that can arise.

We are of the opinion that the in-depth nature and range of hazardous materials covered justify the total costs of \$2,080.00, for attendance.

It is therefore recommended that the Chief Public Health Inspector, Mr. G.V. Harvie, be authorized to attend the two week in-depth Hazardous Materials course in Denver, Colorado, 1981 November 9-20.

S.L. Hemming

Dr. S.L. Hemming, M.B., D.P.H., F.R.C.P., (C)
MEDICAL HEALTH OFFICER

SLH/GVH/d1

SPILLS OF DANGEROUS GOODS

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I INTRODUCTION

Polluters are responsible for spills and all costs related to cleanup.

Insofar as land spills are concerned, the Municipality is responsible to initiate and carry out effective counter measures including containment, disposal of contaminated soil or sorbent materials, and complete restoration of the area to its former condition.

Departments of the Federal Government (e.g. Environment Canada and the National Harbours Board) have jurisdictional authority over spills in coastal waters including Burrard Inlet and the Fraser River. However, should spills in these waters affect Burnaby's foreshore, the Municipality would take the leading rôle as described in the preceeding paragraph.

The extent of involvement by the Provincial and Federal authorities in land spills within the Municipality is dependent on the nature of a spill including the amount, location and type of product. The Health Department's Environmental Health Division will request assistance from the senior levels of government as circumstances may require following an assessment of a spill incident.

Legislation exists for the recovery of costs associated with a cleanup and when considered appropriate, this type of action will be pursued.

II. ROLE OF THE ENVIRONMENTAL HEALTH DIVISION

To investigate and assess hazards to health and the environment arising out of petroleum spills, chemical spills and industrial waste discharges. The Division is also responsible for the coordination of cleanup procedures and disposal of toxic wastes in cooperation with municipal departments and senior government agencies.

III. RESPONSE PROCEDURE

A. NOTIFICATION

The Chief Public Health Inspector or his designee, on being advised that THE PLAN has been activated, will:

- (a) Report to the Burnaby Emergency Command Center;
- (b) Assess the nature of the existing circumstances and coordinate the Environmental Health Division's response accordingly.

B. INITIAL RESPONSE

At the scene of a spill, Environmental Health employees will:

- (a) Identify toxic material spilled;
- (b) Assess hazards to health and environment;
- (c) Deploy sorbent booms, blankets and proceed with preventive measures to prevent the spread of spilled material to environmentally sensitive areas in cooperation with the Engineering and Fire Departments;
- (d) Initiate cleanup procedures with the offending polluter;
- (e) Obtain samples for possible court charges.

C. NOTIFICATION OF SENIOR GOVERNMENTS

Should the spill of dangerous goods require assistance from the senior government departments noted below, such assistance will be requested by the Environmental Health Division in cooperation with the Provincial Emergency Program:

1. PETROLEUM SPILLS

- (a) Environment Canada
- (b) National Harbours Board
- (c) B C Petroleum Association

2. CHEMICAL SPILLS

- (a) Dangerous Goods Information and Emergency Center (CANUTEK)
- (b) Transportation Emergency Assistance Plan (TEAP)
- (c) Chlorine Emergency Plan (CHLOREP)

3. RADIOACTIVE MATERIAL

- (a) Bureau of Social Health Services
- (b) Radiation Protection Service

4. TOXIC WASTE

- (a) Provincial Occupational Health Branch
- (b) Provincial Toxic Waste Specialist
- (c) Regional Public Health Engineer

IV. CONCLUSION OF INCIDENT

In the case of spills occurring within municipal boundaries, the Environmental Health Division in cooperation with the Provincial Emergency Program will ensure that all work pertaining to cleanup, restoration and recovery costs is performed as soon as possible.

Depending on the cause of the spill, the Environmental Health Division will either (a) proceed with charges under Municipal By-Laws and the Provincial Health Act or (b) seek recovery costs in cooperation with senior governments through the Provincial Emergency Program.

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