

TO: CITY MANAGER DATE: 1996 MARCH 27

FROM: EMERGENCY PROGRAM COORDINATOR
DEPUTY FIRE CHIEF - OPERATIONS
DIRECTOR PLANNING & BUILDING
DIRECTOR ENGINEERING
OFFICER IN CHARGE RCMP
MEDICAL HEALTH OFFICER

SUBJECT: EMERGENCY PLANNING

PURPOSE: To provide information on emergency planning as requested by Council.

RECOMMENDATION:

1. THAT this report be received for information purposes.

REPORT

The following motion was adopted by Council on 1996 February 19:

"THAT staff prepare an information report on the most current Emergency Measures Plans that are in place to deal with a major disaster with specific reference to the refineries, all oil and gas storage tanks, water reservoirs and other similar facilities."

The following composite report by various members of staff individually addresses each of the specific requests for information that are contained in Council's motion.

1. **STATUS OF EMERGENCY MEASURES PLANS**
EMERGENCY PROGRAM COORDINATOR

The City's Emergency Preparedness Program includes the following three plans that could be activated in response to an incident at a refinery or any other emergency:

a) Major Emergency Response Plan

This comprehensive plan is a procedural guide that senior officials use for the mobilization and deployment of resources in response to a major emergency. It defines responsibilities, provides an operational framework that enables officials to formulate detailed responses to specific incidents, and contains information on how the City would access the many support organizations that could be called upon for assistance when emergencies occur.

b) Emergency Social Services (ESS) Plan

This plan would be activated if an emergency necessitates the need for evacuees to be provided with essential services such as shelter, food, clothing, counselling and other forms of care and comfort.

c) Traffic Control Plan

This plan provides City officials with guidelines that enable them to coordinate an effective response when normal traffic is disrupted and has to be rerouted and controlled as the result of an emergency.

In addition to the above plans, the Fire, Police, Health, Engineering and Building Departments each has its own procedures for responding to emergencies. Burnaby School District 41 and the Burnaby Branch of the SPCA also have plans for appropriate responses to emergencies within their respective areas of specialization and expertise. These various plans and procedures are complementary to each other and collectively provide the City with a capability to respond effectively to any emergency that may occur in our community.

All plans are periodically updated and exercised.

Copies of the Major Emergency Response Plan, Emergency Social Services Plan and the Traffic Control Plan have been placed in the Councillor's Office. Council members wishing to have personal copies may request them from the Manager's Office. The public and media are also requested to contact the Manager's Office for access to any or all of these emergency plans.

The City has the following additional resources available for responses to major emergencies:

- a) The Emergency Mobile Command Vehicle which can be immediately driven to a disaster site and made fully operational as a centralized communications and command post;
- b) A well equipped Emergency Operations Centre in the Justice Building where senior officials would congregate to coordinate a response to a major emergency;
- c) An intermunicipal radio system that enables all Municipal Emergency Operations Centres in the Lower Mainland to communicate with one another and with the senior levels of government, B.C. Ambulance Service and various other organizations such as the utility companies;
- d) A trained team of senior officials with expertise to perform those duties that are necessary for the execution of effective responses.

2. **REFINERIES - GENERAL**
DEPUTY FIRE CHIEF - OPERATIONS

The Burnaby Fire Department has in place the following emergency response plans:

- a) Petro Canada Burnaby Emergency Response Plan updated December 1, 1995;

- b) Petro Canada Burrard Products Terminal updated March, 1995;
- c) Trans Mountain Jet Fuel Pipeline Systems (including Westridge Terminal) updated February 15, 1995;
- d) Trans Mountain Oil Pipeline System updated August 22, 1994;
- e) Chevron Canada Limited, Burnaby Refinery Oil Spill updated December 15, 1994;
- f) Shellburn Refinery's Marine Environmental Protection Plan December, 1995 is currently being updated.

These plans in conjunction with the Burnaby Major Emergency Response Plan contain response guidelines that through a unified incident command structure are capable of escalating from a minor event to a major disaster requiring mutual aid or provincial, federal and international assistance. The above plans are developed by the refineries, however, Fire Department staff have extensive input to the plans and participate in the review process.

The Fire Department routinely schedules joint training and familiarization exercises with these facilities. Special exercises are scheduled during new construction, water outages, etc. The 1996 implementation of the Fire Department's Computer-Aided Dispatch and Information System will greatly enhance the Department's ability to respond to, and manage, both minor and major events at these and similar facilities.

The above emergency plans are on file with the Fire Department and available for Council's inspection, however, according to instructions received from the refineries, these plans are confidential and not available for public scrutiny.

3. OIL & GAS STORAGE TANKS DIRECTOR PLANNING & BUILDING

Storage facilities for oil and gas products are permitted as principal land uses only in the M3 and M7a Industrial Districts, and are generally found in conjunction with oil refineries, terminals or bulk distribution facilities. However, smaller installations may also be found in other zones as ancillary facilities associated with other commercial, institutional, industrial or even residential uses. For many years Burnaby Council has instructed staff to report any proposed new tankage at oil refinery sites, and Council's approval has been obtained prior to development approvals subject to satisfaction of all relevant bylaws and departmental requirements.

Through the Preliminary Plan Approval (PPA) process applications are referred to a variety of departments, including the Fire and Environmental Health Departments, to ensure that proposals are evaluated early in the development process, and that any requirements related to health, safety, emergency access, firefighting facilities and other concerns are appropriately addressed. Comments and requirements to satisfy those interests are conveyed to the applicant, incorporated in the PPA prior to release and become conditions of any building permits issued for the development subject to satisfaction of all relevant bylaws and departmental requirements.

Storage tanks, while not classed as structures under the B.C. Building Code, generally require permits for foundations which are regulated by the Code and must meet all Code requirements including seismic design. The Fire Prevention Office identifies specific requirements that may include reference to dyking or berm enclosures, the B.C. Fire Code, the Fire Commissioner's requirements, and good engineering practices for fire fighting and protection. The Environmental Health Department has overall procedures for emergency responses, and in addition, Chevron, Shell Oil and Trans Mountain Pipeline each have detailed response plans for emergency response to discharges to the ground, water courses and air.

**4. WATER RESERVOIRS
DIRECTOR ENGINEERING**

Under the City's Major Emergency Response Plan, procedures have been developed for Engineering responses related to collapsed buildings, infrastructure and provision of essential water and sewer services. In addition to these procedures that are currently in place, the City has made provision in the 1996 Capital Budget to update the structural assessment of existing water reservoirs and pumping stations with respect to seismic protection. Results of the assessment will be used as the framework for future seismic upgrading of these structures.

**5. POLICE RESPONSE
OFFICER IN CHARGE, RCMP**

The Burnaby RCMP would play a key role in any major emergency because it has a sophisticated communication system, highly trained staff and the ability to exercise certain authorities that are not normally available to other organizations.

The Detachment's comprehensive emergency plan contains procedures for the mass evacuation of people, traffic and crowd control and security to whatever extent is required by the magnitude of an incident. Mutual aid agreements with other law enforcement agencies would be activated if necessary. The Detachment would also respond to any looting or escalation of crime that may occur during an emergency. Deployment of the Emergency Mobile Command Vehicle and activation of the Emergency Operations Centre would also be initiated by the Detachment if required and in accordance with the nature and scope of an emergency.

One member of the RCMP is actively involved in emergency planning and three officers from the Detachment serve on the City's Major Emergency Planning and Response Committee.

**6. SAFEGUARDING OF PUBLIC HEALTH
MEDICAL HEALTH OFFICER**

Under the City's Major Emergency Response Plan, the Health Department's responsibilities are defined to include activation of the Department's Emergency Response Plan for prompt deployment of emergency health services as may be required; assisting with administering care and providing treatment to injured persons who do not require hospitalization; implementing Extended Home Care Services for patients discharged from hospitals; assisting Burnaby Hospital and other health institutions in the community with evacuations of their patients; initiating and carrying out emergency public health measures including

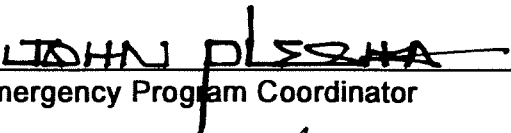
immunizations; providing advice on water, sewage and other public and environmental health related issues; and liaising with the Emergency Public Information Officer on the dissemination of special instructions to the population on matters involving public health.


CONCLUSION

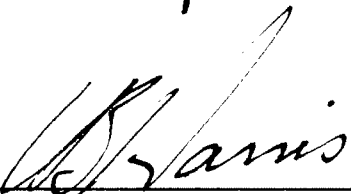
At this time plans are in place and personnel trained to respond to emergencies. Resources including state-of-the-art equipment are available and upgraded as required. Considerable funding has been allocated for the seismic upgrading of facilities, mutual aid agreements have been executed and communications systems significantly improved. This high degree of emphasis on preparedness and planning will continue to be exercised in the future.

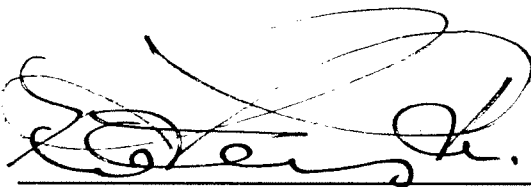
The effectiveness of the City's overall response capability has been demonstrated on a number of occasions including a roof collapse at Save-on-Foods in 1988, several incidents involving hazardous products and evacuations of residents from apartment complexes at night as the result of fire (one in 1995 and recently on January 16 of this year). Major incidents are followed by debriefings where responses are critically evaluated for the purpose of making future responses even more effective.

In conclusion, the City has and will in the future continue to take all reasonable and responsible precautions to ensure that appropriate responses are initiated if emergencies should occur at a refinery or anywhere else in our community.



Emergency Program Coordinator


Director Engineering


Deputy Fire Chief - Operations


Officer in Charge, RCMP


Director Planning & Building


Medical Health Officer

