



City of Richmond

Report to Committee

To: Community Safety Committee
From: Suzanne Bycraft
Manager, Emergency & Environmental
Programs

Date: May 5, 2004
File: 09-5125-01/Vol 01

Re: Emergency Programs 5 Year Progress Report – 1999-2003

Staff Recommendation

1. That the “Emergency Programs 5 Year Progress Report 1999-2003” be received for information.
2. That a copy of the “Emergency Programs 5 Year Progress Report 1999-2003” be sent to the Provincial Emergency Program.

Suzanne Bycraft
Manager, Emergency & Environmental Programs
(3338)

FOR ORIGINATING DIVISION USE ONLY								
ROUTED TO:		CONCURRENCE		CONCURRENCE OF GENERAL MANAGER				
Fire Rescue	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
R.C.M.P.	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
Engineering	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
Public Works Operations	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
Budgets	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
Information Technology	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
Parks Design, Construction & Programs..	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
Building Approvals	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
Transportation	Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>				
REVIEWED BY TAG	YES	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	REVIEWED BY CAO			
					YES	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>

Staff Report

Origin

The Auditor General's 1997/1998 report on earthquake preparedness highlighted a number of shortcomings in both provincial and local government emergency planning for earthquake preparedness. Richmond City Council embraced these recommendations and in 1999 emergency planning was re-structured to provide greater focus. It was later incorporated into the new Community Safety Division. In 2000, Council directed staff to undertake number of initiatives designed to enhance emergency preparedness in Richmond.

The "Emergency Programs 5 Year Progress Report 1999-2003", provided under separate cover, is presented to demonstrate the advances that have been made under Council's direction. It also highlights future initiatives to be undertaken as part of our continued efforts to enhance the state of emergency preparedness in Richmond.

Analysis

Under Council's direction, an emergency planning work program was developed with a view toward meeting the legislative requirements of the City as outlined in the Provincial Emergency Program Act and Local Authority Emergency Management Regulation. These initiatives were also designed to address the shortcomings as highlighted in the Auditor General's report. The Community Safety Committee oversees the emergency planning work and the City's Emergency Planning Committee provides input and assistance to Emergency Programs staff.

There are two principal requirements of the City under the Emergency Program Act:

1. Establish and maintain an Emergency Management Organization, and
2. Prepare emergency plans, which address the potential local risks/emergencies.

Council has established the initial requirement with the adoption of the Emergency Management Organization Bylaw 7234.

To meet the second requirement, extensive work has been done and is highlighted in the Progress Report. Continued and ongoing focus is needed to advance the planning component work outlined by regulatory requirements. The challenge with this aspect of the work is that emergency planning is a 'moving target' – there is a need to constantly keep information current, keep staff and volunteers trained, and to adjust our efforts based on new and emerging threats or issues.

Future Initiatives

Key initiatives the Emergency Planning Committee and Emergency Program staff plan to focus on over the next year include:

- CBRN (Chemical, Biological, Radiological and Nuclear) Response Plan,

- West Nile Virus Abatement Program,
- Communications Strategy, including radio interoperability protocols between police, fire and ambulance,
- Implementation of the Emergency Social Services Plan, and volunteer development,
- An updated Emergency Plan document, including an Emergency Operations Centre Operations Manual and Exercise Schedule,
- A Public Information Plan, including a Public Call Centre and Media Centre at City Hall.

These plans/programs will be brought forward to Council for adoption/endorsement as they are completed.

Financial Impact

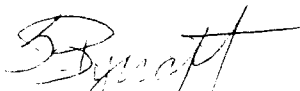
The planning work as highlighted under 'Future Initiatives' will be undertaken within existing budgets and/or will be put forward for funding consideration as part of the City's budget approval process. In addition, the City has been very successful in obtaining federal funding through the Joint Emergency Preparedness Program. These grant monies have been used to undertake a number of the initiatives highlighted in the Progress Report and will be applied to advance some of the Future Initiatives as described in this report.

The "Emergency Programs 5 Year Progress Report 1999-2003" document was produced internally by Emergency Programs and Production Centre staff, representing significant cost savings over undertaking the work through external sources.

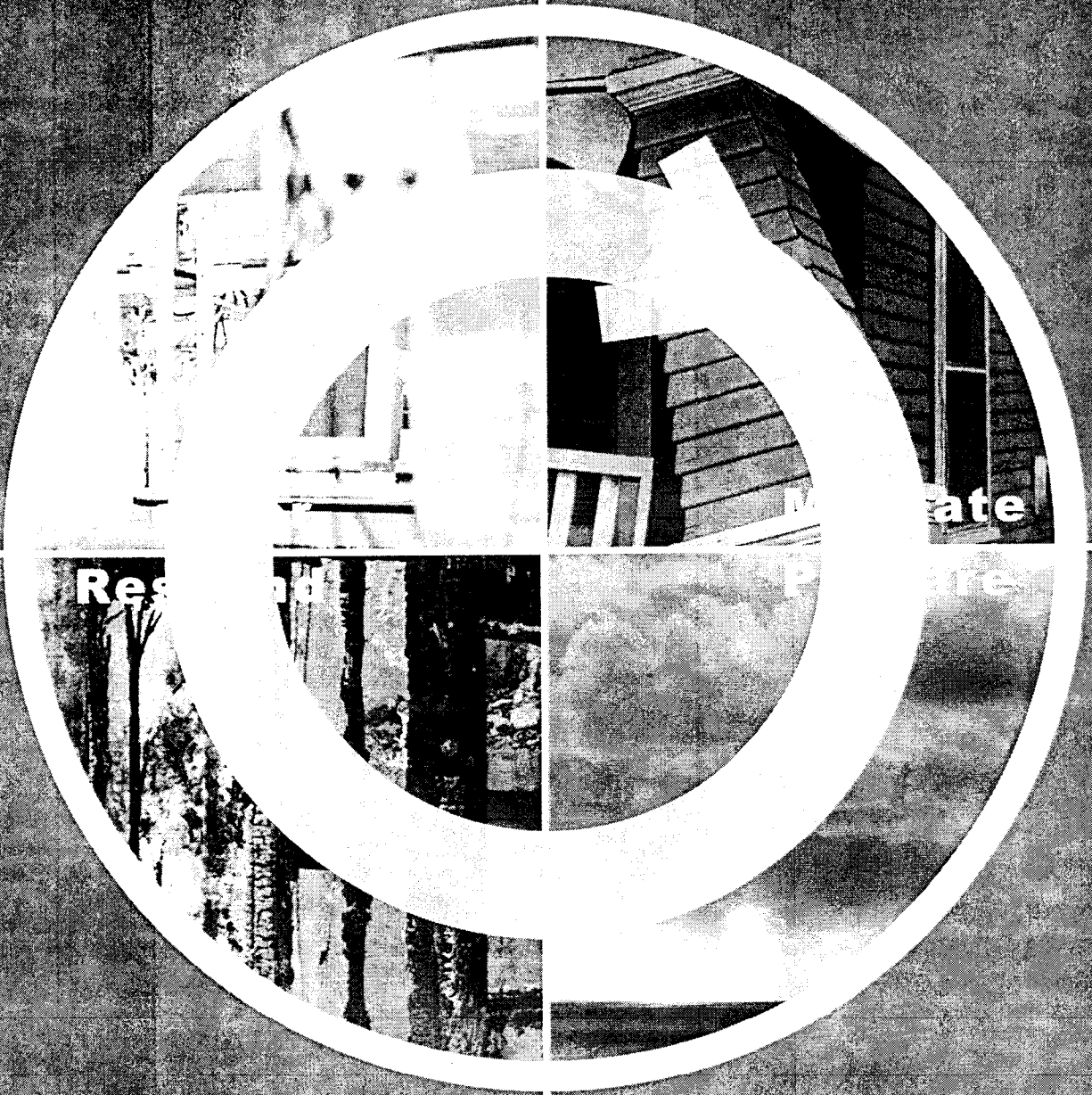
Conclusion

The Council initiatives highlighted in the Progress Report demonstrate a positive upward trend in the enhancement of emergency preparedness in Richmond. This process has been done in a fashion that maintains a corporate and community-wide perspective to the planning approach, and engages key City departments and local response agencies. The report also presents the key planned initiatives for 2004.

The Provincial Emergency Program has responsibility for ensuring compliance by local governments in their areas of responsibility under the Emergency Program Act. As such, it would be appropriate to forward a copy of the "Emergency Programs 5 Year Progress Report 1999-2003" to the Provincial Emergency Program for information.



Suzanne Bycraft
Manager, Emergency & Environmental Programs
(3338)
SB:



Emergency Programs

5 Year Progress Report 1999-2003

RICHMOND
Better in *Every* Way

This report was published in March 2004 by the
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Introduction

Overview

This document is presented by the City's Emergency Planning Committee, which has assigned responsibility under Council policy for developing the Emergency Management Program and Plan for the City. The members of the Emergency Planning Committee are listed in the Emergency Management Organization Chart on page 3.

This document highlights key accomplishments, challenges and future directions for the City's Emergency Program - dating back to 1999, when internal management responsibility was changed, and the function was subsequently incorporated into the Community Safety Division.

Background

In April 2000, Council endorsed a number of Emergency Management Program initiatives designed to ensure preparedness in the City as well as to meet legislative requirements under the Provincial Emergency Program Act. These initiatives fall into the four key aspects of emergency management.

- Mitigation** - Identifying risks and taking actions to reduce or eliminate those risks.
- Preparedness** - Ensuring plans are in place to facilitate an effective response.
- Response** - Emergency operations necessary to protect life and property.
- Recovery** - Sustaining business operations and rebuilding to restore economic viability.

Key Accomplishments

Key highlights have included developing the **City's Volunteer Base**, establishing a **City Emergency Operations Centre**, developing **Community Outreach Programs** and an **Emergency Social Services Draft Plan** and a **Dangerous Goods Spill Response Plan**. As you turn the pages in this report, you will find more information on key progress areas and the impact that these Council initiatives have had on the community.



TOPOFF 2, the US lead exercise prepares North America for chemical, biological, or radiological attacks.

Some Challenges

One of the realities associated with Emergency Planning is the "emergency" nature of the work. One day, work can be progressing steadily on an identified project or plan, and the next day our efforts must be refocused due to emergency events. These range from helping individuals who have been displaced by fire or other localized emergencies, to responding to world events. Some key examples of this follow:

1999/2000

A high snowpack raised concerns about the potential for flooding due to Spring freshet, resulting in the need to prepare a flood response plan. The "Y2K" concern resulted in the need to review City systems and upgrade/prepare for potential computer system failures due to the concern with 6-digit date fields.



Diverted aircraft parked at Vancouver International Airport following the terrorist attacks on September, 11th 2001. Source: Vancouver Sun

2001/2002

The terrorist attacks on the World Trade Centre resulted in activation of the City's Emergency Operations Centre to assist stranded passengers. This, coupled with the accompanying anthrax scare, resulted in the need to commence planning for potential terrorism activity.

2003

The potential spread of West Nile virus to British Columbia and the SARS scare demonstrated the need for active coordination with the local health authority to coordinate planning and prevention efforts. The impact of SARS on the Toronto economy, in particular, highlighted the need for sound emergency planning which addresses community-wide issues.

The proactive approach by Council to undertake a preventive treatment program for West Nile has helped to allay public concerns about the virus, as well as to mitigate the impacts of the virus which is expected to reach the Lower Mainland in 2004.

These events highlight the broad nature of emergency planning generally, indicating the importance of planning from a high level perspective. Emergency planning must be pursued with all the City's corporate interests in mind, as well as the broader needs of the community. To this end, Council has undertaken two key steps to maximize corporate and community mitigation, planning, response and recovery efforts:

1. Established an Emergency Management Organization via Bylaw 7234.

This bylaw clearly establishes the roles which will be applied for response and planning. These roles, which are highlighted on the Emergency Management Organization Chart on the following page, are summarized below:

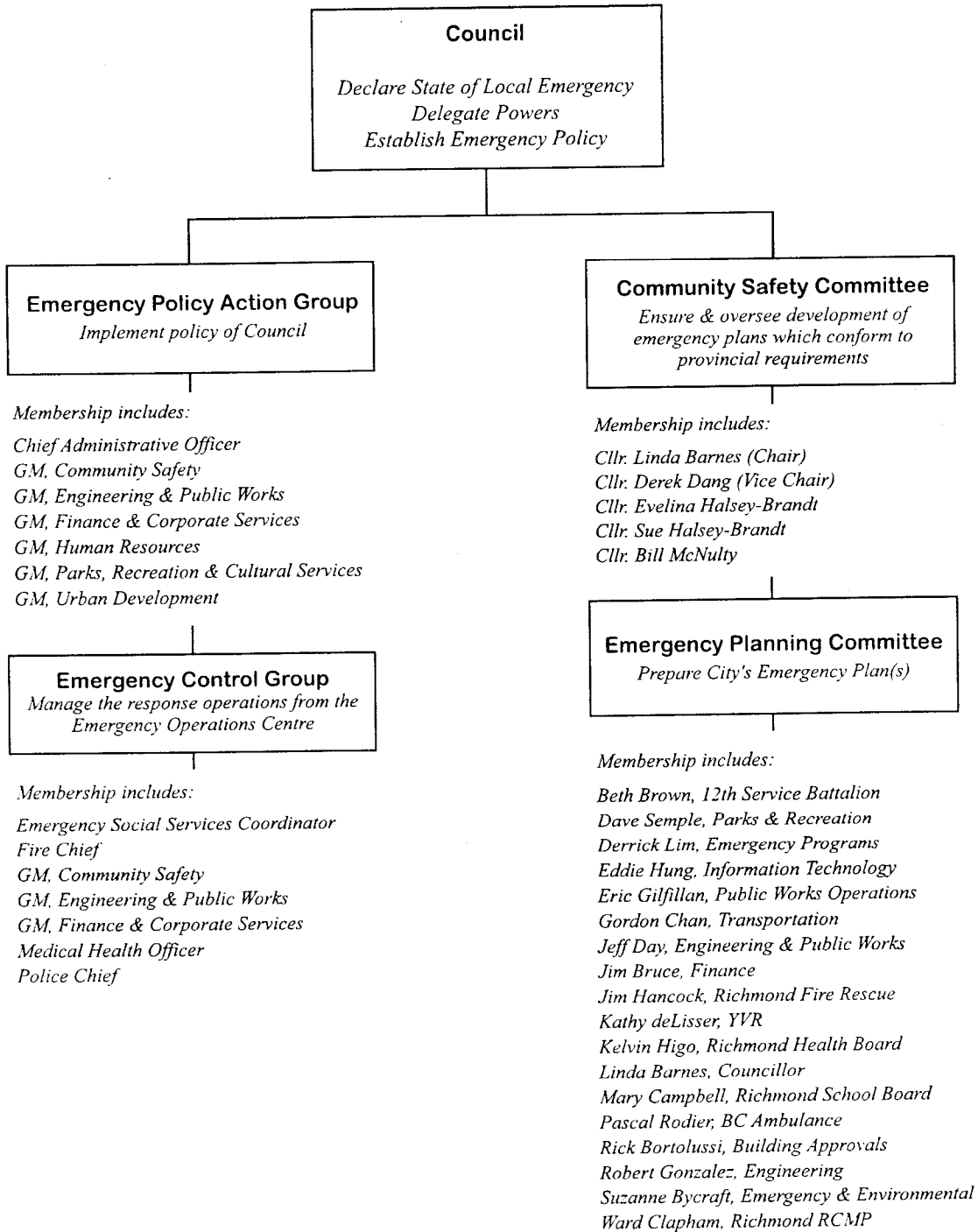
- Emergency Policy/Declaration - Council
- Policy Implementation - Chief Administrative Officer through Senior Management staff
- Response Operations Management - Emergency Control Group
- Emergency Planning - Community Safety Committee via the Emergency Planning Committee

2. Adopted the British Columbia Emergency Management Response System

These standard guidelines for emergency response - the "Incident Command System" - are aimed at ensuring an organized structure is used to maximize the effectiveness of response efforts.

These key initiatives lay the groundwork for developing key planning & response strategies.

Emergency Management Organization



Future directions

Efforts in 2004 will see principal focus on development in the following areas:

- a new, overall **Emergency Plan**, enhanced by an emergency exercise plan
- a **CBRN** (chemical, biological, radiological and nuclear) **Response Plan**
- procedures, protocols and testing to achieve inter-agency radio inter-operability
- implementation of the **City's Emergency Social Services Program**
- West Nile Virus** - Proactive Treatment initiatives & regional planning strategy development

Emergency Program staff will also continue to support committees within the City on related issues, such as the Flood Management Strategy. We will maintain active involvement with other outside committees such as the Regional Emergency Planning Committee, the Joint Emergency Liaison Committee and the Regional Emergency Coordination Centre.

The Emergency Planning Committee will continue to evaluate trends in local and world disasters and adapt our planning efforts accordingly.

Why Emergency Planning

Emergency planning is not only a responsibility of local government - it also makes good economic sense. Sound planning efforts result in a timely and organized response, saving money on response costs and maximizing cost recovery opportunities.

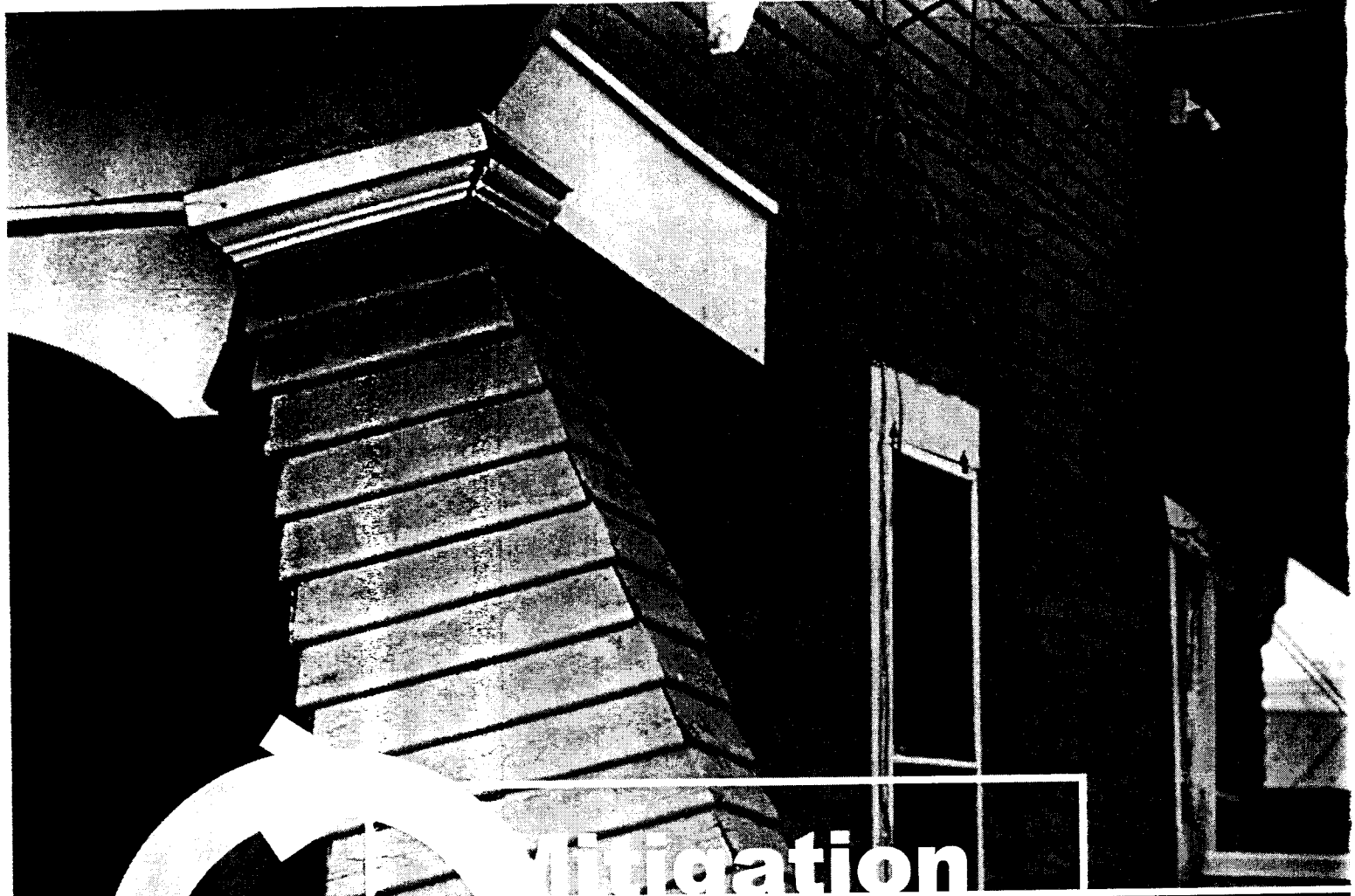
Broader community needs are integral to ensure positive public perception of our response and planning work, as well as to support rapid economic recovery within the business community. Strong leadership at the local level to plan for potential disasters will lessen social and economic impacts when disaster strikes.

Conclusion

Considerable progress has been made in developing the City's overall Emergency Program during the last 5 years. This is due to Council's guidance in endorsing an overall approach to move forward, direction from the Community Safety and Emergency Planning Committees, hard-working and sustained efforts by Emergency Program staff, and support from staff in other areas. Another key factor has been the success the City has had in securing Joint Emergency Preparedness Program (JEPP) funds to apply to the program's development.

Emergency planning is a continuous and involved process which must be actively pursued and maintained on an on-going basis. Integrating emergency planning concepts into the way we do business, ensuring dedicated, continuous and sustained efforts are applied to the programs, and the active involvement of Council, key City departments and agencies, will help to achieve a solid base for the emergency program - one that is sustainable and effective.

This degree of leadership at the local level will only help to maximize our response and recovery capabilities, thereby ensuring Richmond is prepared for and will adequately recover from any disaster. Richmond's livability and economic stability are only enhanced through these efforts.



Mitigation

Emergency Programs Progress Report

**Taking sustained actions
to eliminate or reduce the
risk to human life,
property and the
environment.**

Mitigation Studies

Objective

To prevent or lessen the impact of natural and man-made disasters on the community. The first step in the mitigation process is to determine the potential impact of Richmond's key threats on our infrastructure, City operations, economy, residents, and businesses. By undertaking studies, commonly referred to as a hazard risk and vulnerability analysis, we can begin to develop mitigation strategies and response plans to lessen the damaging effects of our key threats.

Current Initiatives

Current mitigation projects initiated by the Emergency Planning Committee include:

- Emergency Water Supply Report & Task Force
- Earthquake Damage Assessment of Wood Frame Housing

Key Threats

In the Spring of 2000, the Emergency Planning Committee determined the following threats to be the most likely risks to impact Richmond:

Key threats

1	Aircrash	5	CBRN (Chemical, Biological, Radiological and Nuclear)
2	Flooding	6	Dangerous Goods
3	Earthquake	7	Medical Pandemic/Epidemic
4	Severe Weather	8	Sanitary Breach

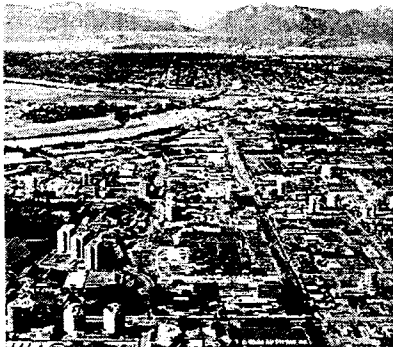
Challenges

Follow-through. Once the studies are complete, we need to evaluate the information, prioritize the recommendations and decide on a course of action. Recommendations often have significant cost implications and are based on the current scientific information so need to be considered carefully.

Future Initiatives

There are a number of recommendations arising from the "Emergency Water Supply in the Event of a Earthquake Report", highlighted on the following page. Work on implementing these initiatives will be undertaken by a variety of City staff who are involved. The principle objective is to identify sources of potable water and water for fire protection services in the event of a major disruption.

Highlights



Aerial photograph of Richmond City Centre. Photo by Donald E. Waite of Global Air Photos.



Home damaged by the 6.7 magnitude earthquake that struck Northridge, California on January 17, 1994.



Emergency Water Supply: In the Event of an Earthquake Report.

Hazard & Risk Analysis

The emergency plan, a key initiative for 2004, focuses on our response priorities for the key hazards which could impact the City. Before the planning could begin, the Emergency Planning Committee participated in a workshop to determine the key hazards which threaten Richmond and assess their impact on our community.

Earthquake Damage Assessment

The City of Richmond is the first community in British Columbia to undertake an earthquake damage assessment of the City's wood frame housing. The purpose of the study was to assess the state of preparedness of wood frame housing within the City of Richmond to withstand the shaking of two types of earthquakes: a local crustal event and a large subduction earthquake off the west coast of Vancouver Island. The study will result in a software planning tool that residents can use to evaluate their own homes and identify actions they can take to help mitigate damage in the event of an earthquake. City staff will use the study to help plan ESS assistance for the number of people that may be displaced from housing which is unsafe to inhabit after an earthquake.

Emergency Water Supply

In June, 2001, the Emergency Planning Committee established a cross-departmental task force to develop strategies to address the provision of drinking water and water for fire protection in the event of an earthquake. In order to develop a plan or recommendations, the task force focused on the first step in the mitigation process: a hazard, risk and vulnerability analysis. The task force's analysis of the City's water system included such activities as an inventory of all relevant studies undertaken by the City and the GVRD to date and an understanding of how the City receives its water supply from the GVRD.

The task force will now follow up on recommendations made in the report entitled, "Emergency Water Supply, In the Event of an Earthquake". The key recommendations arising from the study include evaluating the feasibility of establishing a more secure water source within the core area, reviewing design specifications for seismic resistance, establishing agreements with local suppliers and mutual aid partners, investigating the development of independent water supplies, and permanent water drafting stations for fire fighting purposes.

Mitigation Measures

Objective

Mitigation actions are designed to prevent or lessen the impact of a potential threat. Such measures can be significant in not only averting an event, but also serve to enhance public confidence and feelings of safety in the community, as well as help to maintain economic viability.

Emergency Program's role will vary from directly leading mitigation projects (West Nile Program), to participating or supporting broader initiatives (Flood Management Strategy). The approaches used integrate and address integral aspects of emergency planning and ensure that a focus on broader corporate objectives is maintained.

Current Initiatives

Current mitigation projects being undertaken include:

- West Nile Virus Abatement Program
- Flood Management Strategy

Challenges

Balancing all interests. Mitigative actions must be undertaken in a way that balances the needs of the public, is done in the most cost-effective manner, and recognizes the varying perspectives of the City departments involved.

Future Initiatives

An overall goal is to integrate mitigative decision making into our operational planning goals. Ensuring that the products used by the City in our infrastructure are cost-effective, but designed in a way to mitigate damage in a disaster, such as public works infrastructure.

Highlights



The City has adopted a mosquito control program to mitigate the spread of the West Nile Virus.



Public Works Crews perform dyke maintenance on the shoreline at Terra Nova.



The post-disaster EComm facility is located at 3301 East Pender in Vancouver.

West Nile Virus

The first case of West Nile Virus in North America was detected in New York in 1999. In 2000, the virus began spreading westward. By 2002, the virus was present in most US States and at least 5 Canadian provinces. In 2003, nearly every US State and Canadian province had West Nile present.

In anticipation the virus would spread to British Columbia in 2003, a mosquito control program was undertaken in Richmond to mitigate potential health impacts. Breeding sites were identified and monitored on a weekly basis, treatment via larviciding was undertaken, where required. This proactive approach calmed public concerns and helped set a solid foundation for future programs. Provincial funding assistance of \$50,000 will be applied to a 2004 program, which will include a similar treatment program to 2003, but includes a broader regional approach with a greater degree of consistency and standards.

Flood Management Strategy

Emergency Programs staff are involved in this initiative, which is being led by the Policy Planning Department. Our main role in this project is to ensure the broader issues of emergency planning are integrated into the strategy. This project represents a potentially significant mitigative initiative for the City.

EComm

While the City's transition to EComm has been a long and intense process, the benefits are expected to enhance safety for the citizens of Richmond. The wide area radio network not only enhances daily operations for Richmond RCMP and Fire Rescue, but will also help to ensure emergency communications in a major disaster. This will help to enhance our response efforts and mitigate the impacts of poor communications, which is so frequently a major drawback in disasters. Emergency Programs staff is heading up an initiative to implement inter-agency communications with RCMP, Fire and Ambulance to achieve the true vision of the EComm radio system.

The dispatch function for RCMP is currently in place at EComm and Richmond Fire will transition in May 2004. By having our dispatch function in a post-disaster facility, Richmond has taken mitigative actions to ensure emergency responders will be able to be properly and effectively dispatched to incidents not only on a daily basis, but also in the event of a major disaster.

Community Awareness

Objective

To reduce injuries and to lessen the economic and psychological impacts caused by major disasters, individuals, families and businesses need to be prepared. In a major emergency, residents may be on their own for a minimum of 72 hours. To help residents understand the risks, develop their emergency plans, and take action, the Community Awareness Program aims to deliver our key emergency preparedness messages through a variety of mediums.

Current Initiatives

Services currently offered as part of our community awareness program include:

- Presentations & Educational Workshops
- Community & Special Events
- Brochures & Promotional Material
- Website

The Statistics

The following table illustrates the number of presentations conducted and number of participants attending emergency presentations, displays and special events from 1999-2003.

Community Awareness Statistics

<i>Year</i>	<i>No. of Presentations & Displays</i>	<i>No. of Participants</i>
1999	20	725
2000	22	896
2001	24	1812
2002	27	2364
2003	24	1469

Challenges

Emergency preparedness education is constantly challenged by residents' busy schedules, public apathy and an increasing need for neighbourhood connectedness. With the assistance of our volunteer presenters, Richmond Fire Rescue staff, and first aid partners, we are able to reach a greater number of residents through our public forums, lunchtime work presentations and community centre programming.

Future Initiatives

The foundation of emergency preparedness begins with personal and family preparedness. To build on this well-established foundation, the neighbourhood emergency preparedness program will be our focus for the future. Past earthquakes and other disasters have shown that, in a major emergency, neighbours automatically come together to help one another. With the continued support of Richmond Fire Rescue, St. John Ambulance and other partners, we can assist neighbourhoods with the organization of response teams and the development of neighbourhood emergency plans, to ensure a safe and effective response.

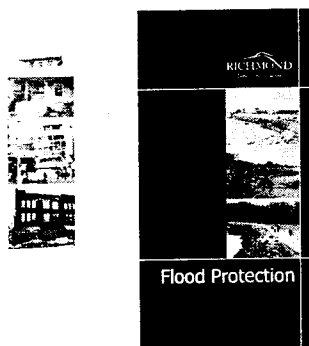
Highlights



Lori Walker & Rachel Ong conduct the first volunteer-delivered emergency preparedness workshop in 2000.



Stilt-walking firefighters entertained families at Community Safety Day, May 2002.



Richmond's Earthquake & Flood brochures outline the steps the City has taken to mitigate against these hazards and what residents can do to prepare.

Emergency Preparedness Workshops

20 volunteers have been trained to deliver the personal emergency preparedness presentations to residents. Since their training in 2000, these volunteers have contributed over 300 hours informing residents about emergency supplies, utility safety, family emergency planning and hazard mitigation. The volunteer contribution has reduced staff overtime and burn out in delivering presentations, as well as helped to reach further into the community with preparedness education.

In addition to the personal emergency preparedness workshops, the Emergency Program Office coordinates specialized training for residents, available at our community centres. Training sessions can include BC Housing's building assessment, Richmond Fire Rescue's fire suppression and disaster first aid.

Special Events

In recognition of National Emergency Preparedness Week and to promote emergency preparedness in Richmond, the City has organized a number of special events. In 1999, the City hosted the Emergency Preparedness Symposium. Over 300 residents participated in seminars ranging in topics from Pets & Disaster, Flooding & Richmond to Emergencies & Insurance.

In 2001 & 2002, the Community Safety Division hosted Community Safety Day. This outdoor emergency fair included games, displays from our various safety partners including ICBC, Coast Guard, BC Ambulance, demonstrations and more. Over 3000 residents participated.

Richmond Publications

As a result of the high level of interest expressed by participants of the Emergency Preparedness Symposium in 1999, brochures were created to address questions about the impact of flooding and earthquakes on Richmond. With the assistance of many experts in the field of geology, flood management, and civil engineering, these brochures were designed to provide factual information about the City's mitigation programs, response planning and general preparedness.

Since 2001, our What's Shakin' newsletter has been keeping our volunteers, emergency suppliers, partner agencies and residents informed. The newsletter discusses what residents & businesses can do to prepare; how the City is preparing; what is happening in our region and around the world; and highlights the contributions of our volunteers.



Preparedness

Emergency Programs Progress Report

Building organizational capacity to facilitate an effective response and recovery from any hazard.

Emergency Management

Objective

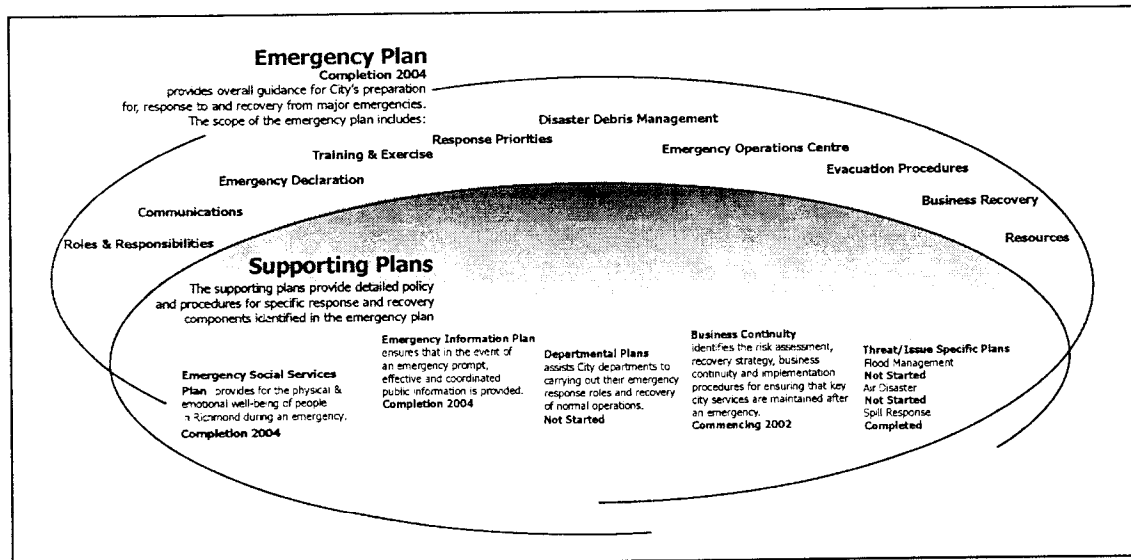
To establish a comprehensive emergency management program to ensure the City not only meets the legislative requirements of the Emergency Program Act, but is well-positioned to plan for, respond to and recover from emerging threats.

Current Initiatives

- Emergency Planning Committee
- Planning Task Forces
- Joint Emergency Preparedness Program - Grant Applications

The Program

The following diagram illustrates the work program originally established by the Emergency Planning Committee and adopted by Council. To address our requirements under the Emergency Program Act and to ensure we are ready to respond when needed, our work program primarily focuses on preparedness initiatives described in detail throughout this section.



Challenges

Emergencies by definition are challenging. With new threats emerging, like SARS and terrorism and their ability to touch almost every aspect of a community or corporation, the challenge for emergency planning is to adapt and adjust. Emergency planning needs to adapt its work program or focus to reflect current trends. To ensure our response plans are well-coordinated and managed, emergency planning needs to take on a corporate and community-wide vision, and include various departments, local, provincial and federal parties in the process.

Future Initiatives

Development of a new and comprehensive Emergency Plan is the first step. Future initiatives will include broader training of staff and emergency exercises to practise our roles - thereby ensuring a smooth and effective response.

Highlights

Summary of JEPP Funding by Project

Project Name	Funding
2000	
ESS Supplies	\$4537.51
Public Information Plan	\$13,673.28
Emergency Resource Database	\$31,456.26
Resource Inventory	\$7,575.00
2001	
Emergency Plan Update	\$10,793.13
Emergency Response Training	\$8,061.46
Communication Equipment	\$16,446.09
Emergency Call Centre	\$38,039.59
CBRN Incident Response Equipment	\$50,426.13
2002	
EOC Equipment	\$19,777.31
TOTAL	\$200,785.76

Emergency Management Plan

In 2002, with assistance of JEPP funding, the Emergency Program began the review and update of the City's Emergency Management Plan. The scope of the emergency plan includes: staff roles and responsibilities, response priorities based on our key threats and recovery strategies. Advance planning, anticipating problems and identifying potential solutions will help responders save lives and property, reduce damage, assist residents and ensure a speedy recovery from a major disaster.

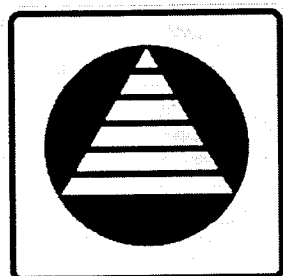
To initiate the process, interviews were conducted with key departments and agencies, including: Engineering & Public Works, RCMP, Richmond Fire Rescue, Transportation, Richmond Health Services, and BC Ambulance. To confirm the information obtained in the interviews and to identify gaps and solutions, those interviewed participated in exercise sessions focusing on Richmond's key threats. The next step: drafting the plan.

JEPP

The Joint Emergency Preparedness Program (JEPP) is a federal cost-sharing initiative that supports local governments undertaking emergency preparedness projects that coincide with national priorities and objectives. Since the adoption of our emergency management bylaw, a requirement for eligibility, the City of Richmond has taken full advantage of this opportunity. In total, JEPP grants totalling \$200,785.76 have been received by the City to support development of the Emergency Program, for projects and supplies including: reception centre kits, the development of an emergency resource database, spill response and communications equipment, and updating of our emergency plan.

Disaster Response Routes

In 2002, Richmond City Council approved disaster response routes for Richmond as part of its ongoing commitment to community safety. These disaster response routes, when activated, will be used by emergency responders to enable life saving equipment, ambulances, police, fire fighters, supply convoys and evacuees to get to where they need to go.



Training

Objective

To provide appropriate training opportunities to staff and volunteers which will enable them to respond effectively in an emergency. The provincial adoption of the new British Columbia Emergency Response Management System (BCERMS) has necessitated changes to the emergency management training.

Current Initiatives

To incorporate BCERMS and implement our Emergency Plans, on-going training is currently provided in the following areas:

- Incident Command System
- Emergency Management
- Emergency Operations Centre
- Dangerous Goods and Spill Response

The Statistics

The following table illustrates the type of training, number of sessions and staff attending from 1999-2003.

Exercise Statistics

<i>Year</i>	<i>Training</i>	
1999	Incident Command System 100	2 sessions 43 employees
2000	Introduction to Emergency Management Incident Command System 100 Incident Command System 200/300 EComm Orientation	6 sessions 66 employees
2001	Introduction to Emergency Management Incident Command System 100 Critical Incident Stress Management Emergency Operations Centre Level 2 Rapid Damage Assessment Light Urban Search & Rescue	7 sessions 119 employees
2002	Incident Command System 200/300 Dangerous Goods Spill Response Emergency Operations Centre Level 2	7 sessions 111 employees
2003	Dangerous Goods Spill Response Spill Mitigation Training ICS 200/300	5 sessions 65 employees

Challenges

One of the biggest challenges in providing training is the constant turnover of staff. Staff turnover will occur for many reasons, such as retirement, reassignment, or reorganization, so training opportunities always need to be available. It is also a challenge for staff to regularly use or maintain the knowledge and skills gained from training. This emphasizes the need for a strong exercise program.

Future Initiatives

To establish a yearly training calendar, which will enable staff to schedule training around their work day and provide opportunities to new staff. The training needs to provide staff with the basic skills required to perform their emergency roles, but must also combine with the corporate training program to offer personal development opportunities.

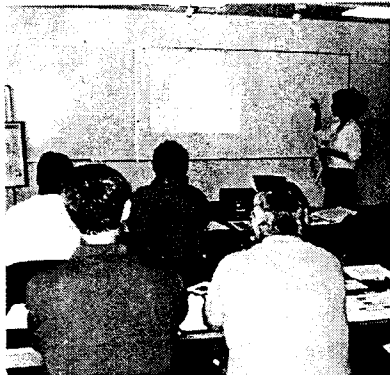
Highlights



Cross departmental teams work through emergency scenarios at ICS training.



Monitoring Y2K: the City's Emergency Operations Centre activation on December 31st, 1999.



Dangerous Goods Spill Response Plan awareness training for responding public works staff.

BCERMS and ICS

Recently, the provincial government has adopted a new British Columbia Emergency Response Management System (BCERMS). In addition to establishing guidelines for emergency response priorities, BCERMS recommends the use of the Incident Command System (ICS) during all responses. Because ICS aims to standardize terminology, establish a standard organizational structure and focus on required functions, the Emergency Program is applying the ICS model in all of its plans. Training sessions include staff from Richmond Health Services, RCMP, Richmond School Board, BC Ambulance Service and Richmond Fire Rescue. This training provides the foundation for this group to work together on implementing and using the ICS model for an effective emergency response.

EOC

The emergency operations centre (EOC) for Richmond is located at the City's Operations Yard. With the adoption of BCERMS, training for staff who will be working at the EOC has been restructured province wide to reflect this change. The development of these new EOC courses is now complete and will be rolled out in 2004. Targeted training for staff will coincide with this roll out so staff may work together to hone the operational flow during an EOC activation. To support the EOC, training has been provided to staff who will set-up and maintain the supplies necessary for an activation.

Dangerous Goods Spill Response

Training needs to take on many forms in order to deliver the appropriate information to the various groups. The flexible training provided for the Dangerous Goods Spill Response Plan is a prime example. With the completion of the Dangerous Goods Spill Response Plan came the need to roll out the plan and ensure staff had the skills and knowledge needed to physically respond to spill incidents.

Awareness training was delivered, in house, to supervisory staff to provide an overview of the key components of the Dangerous Goods Spill Response Plan, including the bylaw, risk assessment and roles & responsibilities. Mitigation training was delivered to key field staff so they understood how to safely contain, mitigate and clean-up spills. To ensure they meet regulatory requirements, technical training will be delivered as a train-the-trainer model to Fire Rescue staff in 2004. This targeted training model has been successful in providing the required information to everyone involved in dangerous goods spills.

Exercises

Objective

To provide opportunities for staff and volunteers to practice their skills and encourage interagency participation. Exercises, mandated by the Emergency Program Act, are key to keeping staff ready to respond to an incident. By practising, participants have the opportunity to work together in a low stress environment to respond to problems so that they can be averted in a real situation.

Current Initiatives

Current on-going exercises include:

- Departmental Tabletops
- Communications Exercises
- Emergency Social Services Exercises
- Participation in YVR Tabletops
- EOC Activation Drills

The Statistics

The following table lists the exercises we have conducted or participated in from 1999-2003.

Exercise Statistics

<i>Year</i>	<i>Name of Exercise</i>	<i>Participants</i>
1999	Operation Javelin	City EOC Staff
2000	St. Paul Tabletop	City EOC Staff
2001	Exercise Downed Goose Exercise Soaker Exercise Shaker National Field Day & Exercise TOPHAT	City EOC Staff IT Department Amateur Radio Volunteers
2002	Spill Response Functional Exercise EOC Activation Drill Operation HipWaders Operation Horizon	YVR, City Staff & Commercial Suppliers Dispatch & EOC Staff Finance Department Recreation Staff, ESS & Amateur Radio Volunteers
2003	Emergency Plan Exercise EOC Activation Drill	Public Works, Health, BC Ambulance, Fire, RCMP Dispatch & EOC Staff

Challenges

Establishing procedures and providing training are the keys to a successful exercise program. The challenge is ensuring that staff have procedures to follow and are trained on them. The procedures provide a measuring tool for staff without which staff may have difficulty determining what improvements to make or processes to adjust.

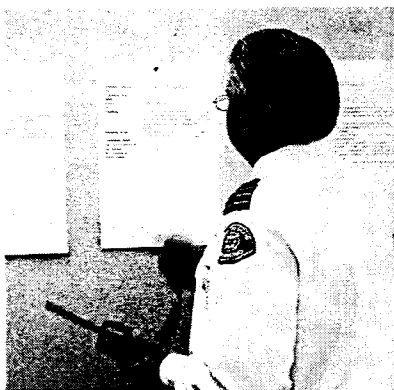
Future Initiatives

In order for responders to practice their skills, regular exercises are needed. Establishing a cross divisional exercise team to develop a regular exercise schedule and conduct the exercises will provide these opportunities.

Highlights



St. John Ambulance Volunteers care for an injured resident in Operation Horizon, October 20th, 2002.



From the exercise control room, facilitators escalate the level of play by calling in new incidents, issues and information.



Local representatives from Richmond School Board, Health Services and City staff participate in Operation Downed Goose.

Operation Horizon

You hear a loud explosion and look out your window. You see a truck parked in a loading dock surrounded by flames. The fire crews arrive and begin working to extinguish the fire. There is a loud knock on your door. An RCMP officer is there to tell you that residents in the area are advised to evacuate the area because the other cylinder in the loading dock may also explode. The City's Emergency Program, who is assisting with the evacuation, has arranged buses to transport everyone to a reception centre.

This was the hypothetical situation over 100 volunteers who participated in the city's Emergency Social Services (ESS) exercise, Operation Horizon, held at South Arm Community Centre. As the exercise unfolded, Parks & Recreation staff supervised the reception centre workers including, trained Emergency Program and St. John Ambulance volunteers. The team provided comfort, food, first aid and information to the residents from Horizon Towers and students from local high schools, who played the role of distraught evacuees.

Spill Response Exercise

In partnership with YVR, the City hosted a spill response exercise on November 13, 2002. Key participants included representatives from Public Works, Environmental & Emergency Programs, RCMP, Richmond Fire Rescue, YVR Airport Authority, Jet Star Bulk Systems, Environment Canada, North Fraser Port Authority and CEDA Reactor.

The group came together to exercise the mobilization, coordination and management of personnel or resources for a spill response in the City. As pieces of information were entered into play via telephone, radio or text communication, individuals assessed the likely consequences, priority of the inputs and responded as needed. This exercise was a great opportunity for all agencies to test out their response strategies, verify the communication links needed and work together to solve the problem.

Operation Downed Goose

Key internal and external staff who would work from the emergency operations centre (EOC) participated in a table top exercise. In this exercise, participants were required to support activities occurring at a mock air plane crash site at No. 3 and Cambie Roads. Throughout the exercise, updates were provided which impacted operational plans and required teamwork. In this safe environment, participants had a chance to experience what could take place at the EOC in an emergency situation and to build on the good working relationships between organizations.

Emergency Social Services

Objective

To outline the City's overall Emergency Social Services (ESS) response strategy in the event of an emergency. ESS are services provided on a short-term basis to preserve the emotional and physical well-being of those affected by an emergency, including response workers. These services may include the temporary provision of food, clothing, lodging, transportation and other assistance. The ESS Plan defines response levels, outlines procedures and identifies resources.

Current Initiatives

Some of the on-going activities required to maintain a state of readiness include:

- Pre-positioned Reception Centre Kits
- Maintaining Resource Contact Information
- Developing Reception Centre Operations Procedures
- Volunteer Recruitment & Training
- Exercises
- Supplier Agreements

The Reception Centres

The following table lists the catchment area for each of the potential reception centres listed by planning area(s):

Designated Reception Centres

<i>This is the designated reception centre:</i>	<i>If you are in this planning area:</i>
1. Cambie Community Centre 2. Hamilton Community Centre 3. Library Cultural Centre 4. Sea Island Community Centre 5. South Arm Community Centre 6. Steveston Community Centre 7. Thompson Community Centre 8. West Richmond Community Centre	East Cambie, East Richmond, West Cambie Hamilton City Centre Sea Island Broadmoor, Fraserlands, Gilmore, Shellmont Steveston Bridgeport, Thompson Blundell, Seafair

Challenges

ESS is the part of emergency planning and management which directly assists those affected by an emergency. The challenge is having the sustained effort required to keep the plan current, to develop the operational procedures and to train the staff or volunteers who will help during an emergency.

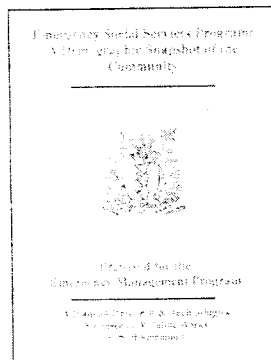
Future Initiatives

While the overall ESS response structure is in place, operational procedures, duty checklists and yearly exercises need to be developed to ensure the plan meets the needs of those affected by disaster.

Highlights



The Emergency Social Services Plan provides overall guidance for the provision of food, clothing & lodging to assist those affected by disaster.



Demographic information, such as age, ethnicity and population, is captured in the Demographic Snapshot to assist in the City's response to a major event.



Thompson Community Centre was activated as a reception centre on September 11th, 2001, to assist the hundreds of stranded passengers.

The ESS Plan Process

An ESS steering committee was established with representatives from several City departments, the School Board, Richmond Health Services, Canadian Red Cross and the Ministry of Human Resources. The ESS steering committee directed the development of the plan. One of the main tasks in the planning process was to hold 15 focus group sessions to investigate the needs, concerns and requirements of the public. After Council approved the draft ESS Plan, it was published on the City's web site for public review. 2004 will see the completion of the final plan, implementation and training of City staff with key roles.

Demographic Snapshot & Facilities Study

During the ESS Plan development, staff conducted a demographic snapshot and a facilities study. Demographic information, such as an age, ethnicity and population breakdown, a listing of special care providers, and a summary of how many Richmond residents work in the community, was compiled from the 1996 Census data. Facility information, such as a structural assessment, a floor plan, an amenities inventory and a key contact list, was collected for all civic facilities in Richmond. The resulting demographic snapshot and facilities study information is used to hone ESS planning procedures, response strategies and recovery efforts.

Community-Based Strategy

One of the goals of the ESS program is to build capacity in the individual planning areas within Richmond. To this end, the Emergency Program has undertaken 2 projects: pre-positioning ESS supplies in the reception centres and the installation of amateur radio equipment at strategic locations in the community.

Supplies have been pre-positioned at the following potential reception centres: Cultural Centre, Cambie, Hamilton, South Arm, West Richmond, Sea Island, Thompson and Steveston Community Centres. These supplies, which include signage, identification vests, forms, stationery, and first aid kits, will be used when these facilities are activated as reception centres.

Communications equipment, essential to connect the City's emergency network during a disaster, was purchased as part of a JEPP cost sharing grant project. In 2004, Phase 1 of this project will connect Richmond General Hospital, the Works Yard, City Hall and several community centres with installation of back-up radio communications.

Volunteer Management

Objective

To manage volunteers, registered or convergent, so that they may assist before, during or after an emergency. Volunteers are at the heart of an emergency response. They are typically the individuals who work with families to get them the assistance they need, with community groups to prepare for emergencies or with staff to ensure the response goes well. In order to utilize this valuable resource, volunteers need to be managed well.

Current Initiatives

The following on-going initiatives are part of our comprehensive volunteer management cycle:

- Screening
- Exercises
- Records
- Training
- Coordination
- Recognition

The Statistics

The following table illustrates the number of volunteers registered with the Emergency Program, the total number of sessions held, number of volunteers that participated and the number of hours contributed by volunteers during emergency responses, public education workshops, training, exercises and special events from 1999-2003.

Volunteer Participation

Year	No. of Volunteers	Participation in special events, public education, training & exercises		
		Sessions	No. of Volunteers	Total Volunteer Hrs.
1999	0	0	0	0
2000	35	2	112	283
2001	24	51	291	1613
2002	200	55	336	1895
2003	154	33	146	828

Challenges

Over the years, management of the volunteer core has been sporadic. This has been addressed through the appointment of an ESS/Volunteer Management Coordinator in 2003. The challenge ahead of us is to maintain and build on the progress that has been achieved. Volunteers are more than willing to commit their time and energy to help the community, but they require a commitment from the City to train, manage and engage them.

Future Initiatives

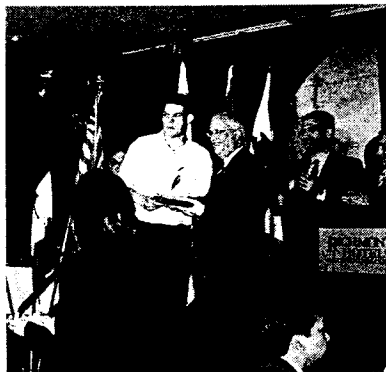
The goal of the program is to recruit and train enough volunteers to establish teams centred around each of the designated reception centres in Richmond. This initiative will tie in well with the Neighbourhood Emergency Preparedness Program, where neighbours will be able to help neighbours.

To support the implementation of ESS initiatives in the community, the development of an Emergency Social Services Committee, comprised of city staff, local agencies and community volunteers, is another key focus for the future.

Highlights



Volunteer Road Trip: Volunteers attended a presentation on the September 11th Terrorist attacks at the Justice Institute.



Mayor Malcolm Brodie presents Emergency Program Volunteer, Mark Scott with the Community Safety Volunteer Award.



The Personal Disaster Assistance Volunteers receive training from Provincial Trainer, Colleen Vaughn.

Volunteer Screening

In a new initiative, the Emergency Program has contracted Volunteer Richmond Information Services to interview, screen and orient new Emergency Program volunteers. This partnership has permitted the Emergency Program to focus on training, assigning and recognizing qualified volunteers while drawing on the expertise of Volunteer Richmond staff for the initial screening process.

Recognition

Volunteers are the key element in our ESS Program. They provide many hours of their time to attend seminars, participate in training and assist during an emergency. To recognize our volunteers' efforts, the Emergency Program publishes "Thank You" ads in the local newspapers, nominates them for community awards and celebrates their achievements throughout the year.

In 2003, Rachel Meloche and Matthew Millar received U-ROC (Richmond Outstanding Community) awards. Both received the award for their contribution and dedication to organizations such as the City's Emergency Program, the Red Cross and Medical Ventures. Also receiving an award was Mark Scott who won Community Safety Volunteer of the Year. He was recognized for his contributions to the City's Emergency Program, Community Safety Advisory Task Force and Coast Guard Auxiliary Unit.

Personal Disaster Assistance Response Team

Personal Disaster Assistance (PDA) is a program that provides support to individuals who are displaced from their homes due to fire or other emergency situations. If support for the family is not immediately available through family, friends or insurance, a response team is activated to administer the PDA Program. The team assists in providing referrals for temporary accommodation, food, clothing and other necessities for up to three days after an emergency.

PDA is a team effort: the provincial government, through the Provincial Emergency Program and the Ministry of Human Resources, fund and support the program; the Canadian Red Cross provide the training and care kits needed for the volunteers; the Emergency Program facilitates the coordination and activation of the team; and volunteers provide the support families need to start on the road to recovery. As well, other organizations, such as Richmond Health Services, SUCCESS, and Victim Services are activated as needs for the families are identified.

Richmond's 14 member volunteer team is a dedicated group who are on call 24 hours a day, ready to help.



Emergency Response

Emergency Programs Progress Report

Conducting emergency operations to save lives and property by taking action to reduce the hazard, assist victims and restore critical public services.

Emergency Operations Centre

Objective

To establish a command centre to manage the City's response to major emergencies. The City's Emergency Operations Centre (EOC), located at the Public Works Yard, can be activated by the Mayor, Chief Administrative Officer, any member of the Emergency Control Group, as identified in Bylaw 7234, Emergency Management Organization Establishment, and the Emergency Program Manager. When activated, the EOC will provide overall jurisdictional direction and control, coordination and resource support in accordance with emergency policy as established by Council.

Current Initiatives

On-going activities required to ensure the EOC is operational when required include:

- Regular Testing of Communication and Audio Visual Equipment
- Maintenance of Supplies
- EOC Training and Exercises
- Development of EOC Operational Procedures Manual

The Facility

Based on BCERMS, the EOC operations are divided into five functional areas. This will help ensure that the EOC will operate effectively and consistently with its regional and provincial counterparts. The 5 functional areas are described below:

EOC functions

Function	Role
Management	responsible for overall emergency policy coordination, public information, media relations, agency liaison and risk management coordination
Operations	responsible for coordinating all jurisdictional operations in support of the emergency response and implementation of the Action Plan
Planning	responsible for collecting, evaluating and disseminating information, developing action plans and situation status reports; maintaining all EOC documentation
Logistics	responsible for providing facilities, services and personnel, equipment and materials
Finance/Administration	responsible for all financial activities and other administrative aspects

Challenges

The EOC environment, when activated for an incident, can be loud, busy and crowded. A proper facility should be transparent. As a dual facility building, the EOC is a challenge to maintain, coordinate training and exercises within and adequate space is a considerable concern.

Future Initiatives

As part of the replacement of the Community Safety Buildings project, space for a new EOC is being considered. EOC Operational Procedures are also being developed to outline the roles and responsibilities of positions within the EOC structure and to provide detailed checklists, forms and templates to aid staff with their role.

Highlights



The City's Emergency Operations Centre is located at the City Works Yard on Lynas Lane.

Category	Code	Clear	Line	Y2K	Update
CERIS					
Personnel	101		1		
Equipment	102		2		
Supplies	103		3		
Volunteers	104		4		
Other	105		5		
Call Lines	106		6		
Resources	107		7		
Management	108		8		
People	109		9		

CERIS (Community Emergency Resource Information System) maintains essential information on key suppliers, volunteers and staff.



The City's Emergency Operations Centre was activated on September 11th, 2001 to coordinate the City's response efforts.

Y2K

In 1999, the emergency program established the City's Emergency Operations Centre (EOC) at the Works Yard's Inspection & Survey Building. To ensure the City would have a functional headquarters from which to manage our response to Y2K and future incidents, the EOC was equipped with: backup communications systems including Centrex telephone lines and satellite phones, emergency water and food, audio visual equipment to allow staff to monitor the media and world events, aerial maps of the City, emergency response plans and important documents. Seismic upgrades were also completed to improve the building's survivability in the event of an earthquake.

The set-up of the EOC was completed in time for Y2K. The EOC was activated and staffed on December 31st, 1999 to monitor events as the clocks turned over to the Year 2000.

CERIS

A key part of emergency management is accessing and maintaining vital information. This need led to the development of a division wide database which contains current information used during an emergency response, such as emergency supplier or staff contact information. CERIS was developed as a webbased application that will assist the EOC logistics section and first responders to obtain crucial resources quickly.

Currently, CERIS - Community Emergency Resource Information System, is used on a daily basis in the Emergency Program to track staff or volunteer training, contributions and information. This tool is also used to address operational needs, i.e. training and presentation scheduling, tracking attendance at events and supplier reports. This project was funded with the assistance of the Government of Canada through JEPP - the Joint Emergency Preparedness Program.

September 11th, 2001

Following the terrorist attacks on the World Trade Centre in New York and the Pentagon in Washington, approximately 34 aircraft carrying 8543 passengers were diverted to Vancouver International Airport. To assist the stranded passengers and support RCMP, Richmond Fire Rescue and YVR staff on site, the City activated the Emergency Operations Centre. Key activities included providing additional resources such as food, water, tents, transportation and translators to the airport and activating the City's ESS Response to provide basic care to the passengers.

ESS Response

Objective

To provide Emergency Social Services (ESS) to individuals and workers during an emergency. ESS are those services, including the temporary provision of emergency food, clothing, lodging, transportation and other assistance, provided on a short-term basis to preserve the emotional and physical well-being of those affected by an emergency. During a response, volunteers and staff assess the needs of the individuals at the scene or in a reception centre and work with provincial, regional or local organizations to provide the necessary assistance.

Current Initiatives

The following activities are required to maintain our current state of readiness:

- Maintenance of Supplier Agreements
- Coordination of Volunteer Response Teams
- Team Activation Drills
- Maintenance of Existing Procedures

The Statistics

The following table illustrates the number of ESS responses, evacuees assisted and volunteer service hours from 1999-2003.

Emergency Social Services Response Statistics

<i>Year</i>	<i>No. of Incidents</i>	<i>People assisted</i>	<i>Volunteer hours</i>
1999	1	6	0
2000	7	102	0
2001	5	250	70
2002	4	172	151
2003	2	9*	439

* Several volunteers contributed over four hundred volunteer hours to assist the thousands of residents affected by the BC Wildfires.

Challenges

An effective ESS response depends on trained responders, organized resources and established procedures that may be deployed at a moment's notice. The challenge is to ensure that responders have the right tools - training, equipment, information and skills - to do the job well. This means having resources available to maintain plans, procedures and contact lists, to conduct training, exercises and drills and to coordinate volunteers, staff and other agencies during non-response periods.

Future Initiatives

Continued work on procedures, agreements and checklists with internal departments and external agencies will facilitate more effective future ESS responses.

Highlights



PDA Volunteers responded to a devastating fire at Canterbury Court, October 9, 2000. Photo Source: Richmond Review



Passengers line up at YVR to return home after the terrorist attacks on September 11th, 2001. Photo Source: Vancouver Sun



Fire fighters fight the blaze at Bay Villa apartments on Minoru Boulevard on January, 25th, 2002. Photo Source: Richmond News

September 11th, 2001

On September 11th, 2001, following the horrific terrorist attacks in the United States, thirty-four planes were diverted to Vancouver International Airport. The City of Richmond activated its ESS Plan in order to assist airport response workers and the stranded travellers.

Richmond emergency staff, along with over 40 trained volunteers and concerned members of the community, worked to find lodging for the travellers and co-ordinate assisting agencies' efforts to provide everything from cell phones and internet access to food and transportation. Emergency operations were based at the City's Emergency Reception Centre in Thompson Community Centre.

Bay Villa Apartments

On January 25th, 2002, a spark from a plumber's blow torch started the fire at the Bay Villa apartments on Minoru Boulevard. Richmond Emergency Program volunteers and staff were called to assist the residents as the fire blazed throughout the 1960's building. Although all the residents made it out safely, the building was deemed uninhabitable and left people homeless, many without insurance.

Significant support was required to assist those residents with special needs. With the help of 7 volunteers, who contributed a total of 121 hours, the 139 victims were provided temporary accommodation, translation services, access to medication, food and personal items. To provide emotional support and counselling services to evacuees in need, Richmond's ESS Team partnered with RCMP Victim Services.

As of January 2004, the Bay Villa apartments has been demolished for reconstruction.

BC Wildfires: Summer of 2003

The hundreds of wildfires that raged through the BC interior during the Summer of 2003 caused millions of dollars in damages and mass evacuations in several cities. Richmond Emergency Program volunteers that had received registration & inquiry training were able to assist at the Red Cross' Central Registry and Inquiry Bureau (CRIB) in Vancouver. Approximately 10 volunteers contributed over 400 hours at the CRIB receiving donations to support the response and recovery efforts; helping to reunite over 2,200 families; and aiding the response to help those endangered by the fires.

Four Richmond Amateur Radio Volunteers were stationed at the Kelowna Emergency Operations Centre and the various reception centres to relieve the local Amateur Radio volunteers. They contributed approximately 240 hours providing a vital communication link.

Dangerous Goods Spill Response

Objective

To establish a comprehensive program to address dangerous goods spills and pollution incidents in the City of Richmond. While Richmond Fire Rescue and Public Works staff routinely respond to hazardous material spills and pollution incidents, the Dangerous Goods Spill Response Plan and supporting initiatives clearly outline the roles and responsibilities, risk assessment, general procedures, essential training, supplies and supporting resources, to ensure a well-managed response. Bylaw 7435, "Pollution Prevention & Clean up Regulation", was also developed to provide a cost-recovery mechanism for costs incurred by the City associated with spill clean-up.

Current Initiatives

On-going activities which support the Dangerous Goods Spill Response Plan include:

- Bylaw Enforcement
- Incident Tracking
- Training Program - Mitigation Training and Plan Orientation
- Supplier Agreements
- Maintenance of Supplies and Equipment

The Statistics

The following statistics illustrate the approximate number of spill response incidents staff have responded to since 1999:

Spill Response Incidents

Year	No. of Spill Incidents	
	Richmond Fire Rescue	Public Works/Environmental Pgms
1999	281	15
2000	208	19
2001	139	32
2002	99	26
2003	98	47

Challenges

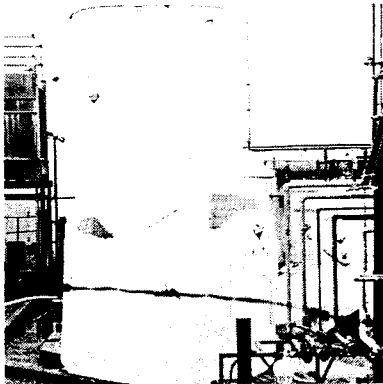
With the establishment of a new bylaw comes the challenge of enforcing it. The Emergency & Environmental Programs Department is working together with Community Bylaws to ensure staff have the proper training and procedures in place to enforce the bylaw track cases and recuperate costs.

Future Initiatives

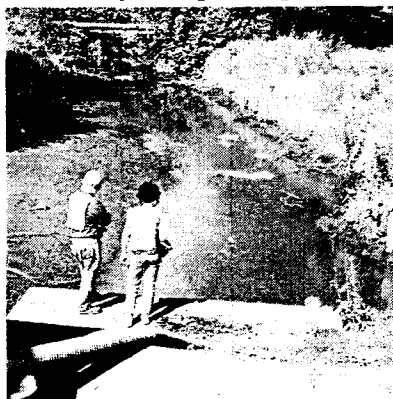
Ongoing components of this program will include training of new staff and exercising our response to large spill incidents. The exercises will test coordination with varying agencies and departments and emergency procedures such as site command and evacuations.

During the presentation of this plan to the City's Emergency Planning Committee, staff were requested to investigate maintenance of the plan in a digital format that could be made available to first responders at the scene.

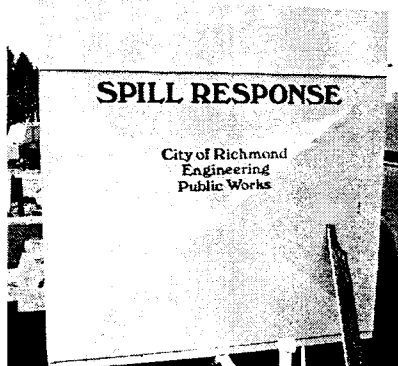
Highlights



On November 6, 2001, a burst storage tank containing 12% sodium hyperchloride caused a level 3 spill response and the evacuation of the neighbouring area.



A call from the public initiates a staff investigation of an unknown yellow foam floating in the ditch north of River Road.



A spill response trailer, containing essential supplies needed to mitigate a spill, is located at the Public Works Yard.

Ammonia Spill

On June 5th, 2001 Richmond Fire Rescue received reports of an odour, and people experiencing burning eyes, in the Minoru Park area. With the assistance of Public Works staff, the source of the odour was identified as a ditch near Minoru Arena.

Earlier in the day, a contractor servicing the condenser for the Arena's refrigeration unit had removed ammonia from the unit, diluted it, and begun flushing the chemical. The contractor had intended to discharge the diluted ammonia to the sanitary sewer system, but instead, mistakenly discharged it to the storm sewer system. As the odour began to worsen over the next several hours, a spill response was mounted.

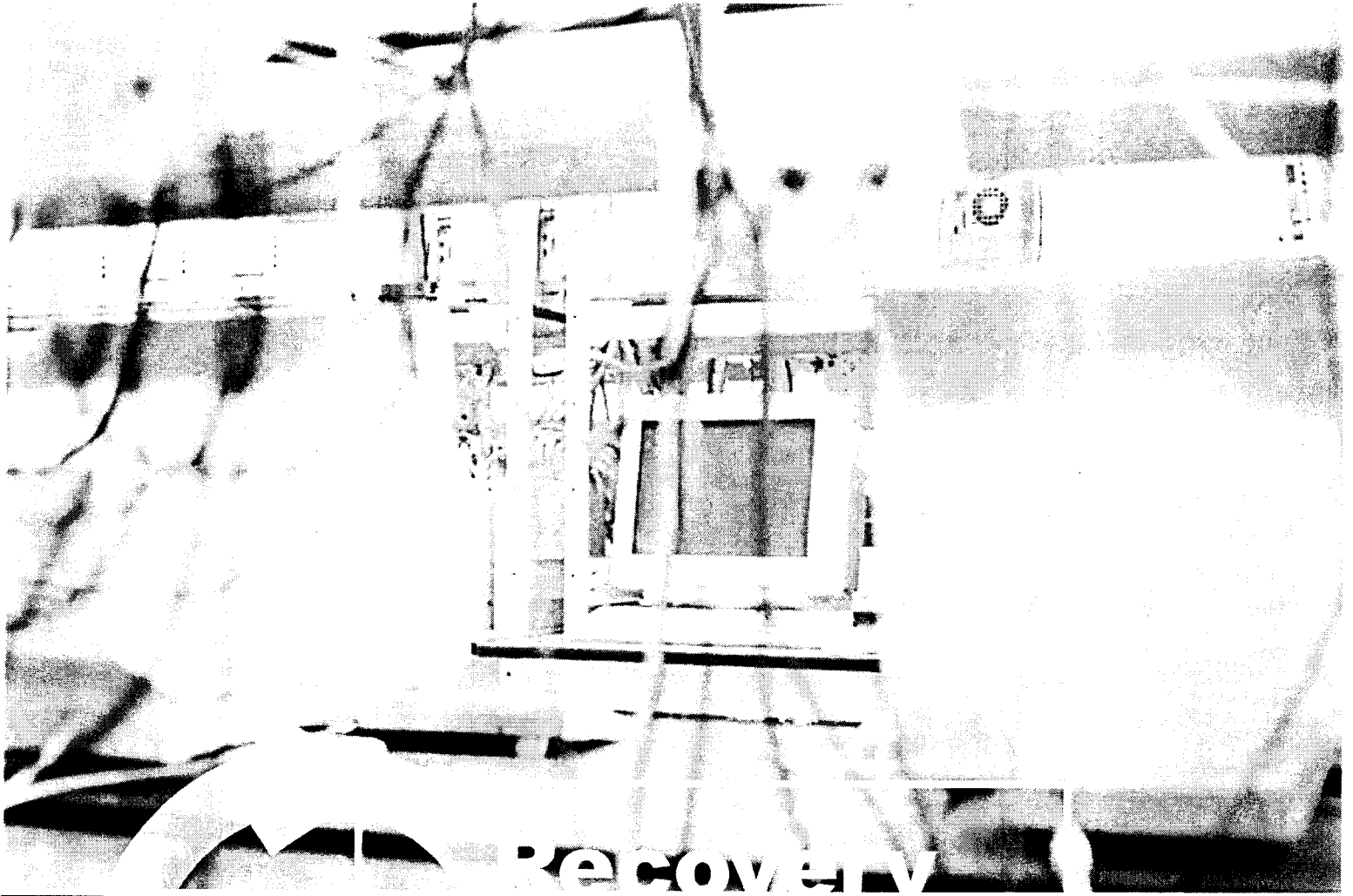
Richmond Fire Rescue established a Command Post at Minoru Arena and began preparation to isolate and evacuate the immediate area. The Emergency and Environmental Programs Manager was notified; who in turn notified Vancouver/Richmond Health Board and contacted the Provincial Emergency Program to request an Environmental Emergency Response Officer. Once the area was cleared Richmond Fire Rescue and Public Works worked together to clean-up the spill.

The contractor who caused the spill attended the scene, accepted full responsibility and agreed to pay all related clean-up charges. The City has worked with the company to ensure proper disposal procedures are followed in the future.

Supplies & Equipment

To ensure staff have the supplies and equipment required to respond to dangerous goods incidents, the City has entered into agreements with suppliers to ensure access to key services are available. The following companies have been engaged for a 3 year contract: Rocky Mountain Environmental - to provide 24 hour access to dangerous goods response supplies; Hazco Environmental - to transport and process collected spill materials and undertake remediation, as required; CEDA-REACTOR Ltd. - to provide technical advice, spill response and clean-up services.

JEPP funding has once again assisted us with the purchase of essential emergency supplies. Personal protective, monitoring and decontamination equipment was purchased to help Richmond Fire Rescue respond to dangerous goods spill incidents in accordance with standard safety precautions. JEPP approved funding for \$66,078.58; 75% of the total equipment cost.

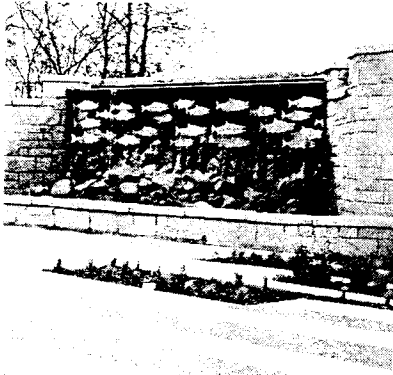


Recovery

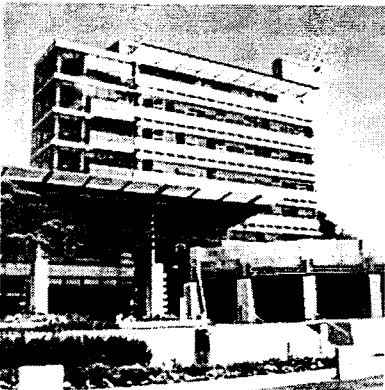
Emergency Programs Progress Report

Rebuilding communities so that individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards.

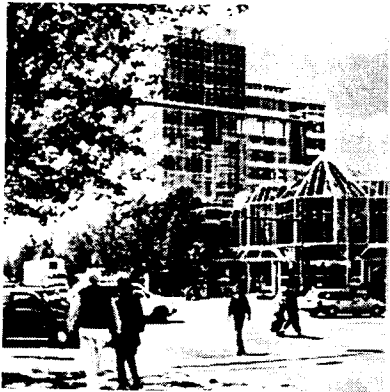
Highlights



The Hollybridge Pump Station on River Road: Continuity of the City's water system is a key priority in an emergency.



City Hall, the heart of City business, is a key priority in the City's Business Continuity strategy.



Richmond City Hall and neighbouring businesses at Westminster Highway and No. 3 Road.

Business Continuity Plan

The vital part of any business continuity planning process is prioritizing the business areas of the organization. Senior administrators prioritized the City's business areas based on the needs and demands of the community, local businesses and residents. The remaining tasks in the business continuity planning process which include: conducting business impact analyses of key business areas, developing appropriate continuity procedures, implementing, testing and maintaining these procedures; now have a solid foundation from which to develop.

BIA Interviews

Once business areas were prioritized, work began on the Business Impact Analysis (BIA) interviews for six areas. The goal of the BIA in each business area is to investigate the impact on the organization, community or residents, if the service is not available, the people, technology and processes required to perform tasks, the acceptable downtime, and the existing backup, recovery or continuity procedures. The information gathered permits us to identify gaps and proceed with the next task in the business continuity planning process: developing the appropriate procedures.

The Process Continues

The next steps of the planning process are to develop, implement, test and modify the continuity procedures for each business area. All of these procedures come together to form part of the City's Business Continuity Plan. Over time, the other parts of the plan containing the continuity procedures for the remaining business areas will be completed. Regardless of which stage the plan is at, it is a living document that will need to be reviewed as processes are retired, revised or implemented in the business areas.