Mammoth evacuation successful after chlorine gas threat

The largest evacuation in North America was carried out in Mississauga, west of Toronto, when more than 200,000 residents were ordered to leave their homes, November 10, because of fear of a major chlorine gas escape from a derailed freight train.

Chlorine gas began to spread across the area shortly before midnight after 24 cars were derailed setting off an explosion in several propane cars and rupturing a tanker carrying chlorine, which leaked into the atmosphere. The evacuation cleared two-thirds of Mississauga in less than 14 hours.

Result of much study

Peel Regional Police Superintendent Karl Barnhart, who was the first senior officer at the derailment site, called the police force's local disaster plan into effect. The plan, he said, "is a comprehensive document put together as a result of much study in conjunction with the surrounding police forces, hospitals, fire department and other governmental functions".

Once alerted, the Peel police communications office began a series of phone calls to police officials, provincial environment officials, the fire department, chemical experts, the Red Cross and Canadian Pacific Railways, which owned the derailed train.

A command centre was established an hour later in a mobile trailer at the derailment site where a "think tank" made the crucial decision about evacuating homes.

"From that point on everything [was] centrally monitored. The weather bureau advised us of wind, we [had] people taking air samples. Hospitals have their own disaster plans and our disaster plan is integrated with the hospital and fire department," said Superintendent Barnhart.

Several hours after the explosion, Peel Regional Police and Metro Toronto ambulance crews began moving into residential areas downwind from the six blazing tanker cars. The evacuation teams pounded on doors as emergency vehicles cruised slowly up the streets sounding sirens and warning residents by loudspeakers of the danger. Although most residents left in their own cars, Mississauga Transit buses stood by at intersections taking some to emergency centres in shopping malls, area schools and

churches. At first, police evacuated only a mile-square area but as the threat of the chlorine tank exploding worsened the area of evacuation widened.

Mississauga Hospital, one of two hospitals evacuated, brought in Mississauga Transit buses and ambulances from surrounding areas to aid in the transfer of patients to other area hospitals.

Red Cross disaster teams were set up in high schools, registering people forced out of their homes and filing their names on cards so they could tell callers whether friends or relatives were there.

About 500 policemen from the Peel, Metro Toronto, Niagara Falls and Ontario Provincial Police forces combined to help people leave the area. At the request of Ontario Attorney-General Roy McMurtry, 250 Canadian Forces troops from Petawawa, northwest of Ottawa, were flown in. Police and soldiers stood guard in the lobbies of deserted apartment buildings and shopping centres and cruisers patrolled the evacuated area to prevent looting.

The Canadian Forces sent 32 self-contained breathing masks and air packs for police and firemen working close to the derailment. Later, 40 off-duty Royal Canadian Mounted Police were called in to spell off Mississauga police who had been on duty since the time of the accident.

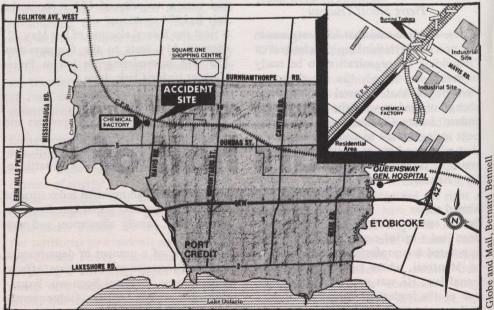
Tanker drained

Meanwhile, chemical experts from Dow Chemical Canada Ltd. of Sarnia, Ontario, which owned the chlorine, worked unsuccessfully to patch the hole in the chlorine tanker. Six days later the tanker was finally drained of the remaining chlorine. (Canadian chemical companies belong to federal emergency programs which provide teams of experts who give technical advice at the scene of an accident. The Transportation Emergency Assistance Program and the Chlorine Emergency Program were set up by the Federal Government and the chemical companies to deal with accidents like the derailment.) Three days after the accident, the first of the 200,000 residents returned to their homes, with the remaining evacuees returning over the next three days.

Flames seen from afar

In all 55 tons of chlorine escaped without causing serious injury. Officials now speculate that most of the poison drifted to the ground in harmless concentrations in an area about 100 kilometres wide. According to experts the flames, visible 50 kilometres away at their peak, created a skyward rush of hot air which carried the chlorine in gas form high into the atmosphere; at least 60 per cent of the 90 tons of chlorine in the car was blown into the sky within minutes of the derailment.

Peel Regional Police Inspector Ewen MacDonald, author of the police disaster plan, credited the media as "instruments in the smooth evacuation of the area". The police force used the media to feed selected information to the residents and to broadcast the logistics for clearing the area in a staged and orderly fashion.



More than 200,000 Mississauga residents were evacuated from the shaded area of the map.