THE TEXACO FIRE - OCTOBER 2, 1978

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Working Paper ERR-4

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PREFACE

This report on the Texaco Fire of October 2, 1978 was the first case-study undertaken by the Emergency Planning Project formed at the Institute for Environmental Studies with funding from Emergency Planning Canada. Subsequent case-studies have taken their methodologies and frameworks of presentation from this study.

It was felt that attempts at broader analyses of emergency planning should have as their starting point the collection and assessment of local or municipal responses to emergency situations. The province of Ontario has a policy of relying on these responses for immediate assistance and mitigation of such situations; and the Project began its work by assembling municipal emergency plans, followed by undertaking analyses of how what was officially in print was (or was not) implemented.

While the Texaco study has an intrinsic importance of its own, it is of added importance due to the Mississauga Train Derailment of November 10, 1979. It has been widely noted that the Texaco Fire (as well as other emergencies in the area) was a "dry run" for the larger-scale emergency of 1979. Not only were both events situated in Mississauga (Peel Region), but the same municipal and regional personnel were, in large part, involved in the response—especially in the early stages of the later emergency.

It should be further noted that this case study was written before the Mississauga Train Derailment; and that a case-study of that emergency will be forthcoming.
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Incident

On the morning of October 2, 1978 Thomas Albert Coxhead set a $2.7 million fire at the Texaco refinery where he was employed as a quality control technician. Thomas Coxhead, who had celebrated his twenty-fourth birthday on October 1, 1978, was disappointed that his parents had not thrown him a birthday party. At 12:30 a.m. on October 2, 1978, he left his parents' house and went out for a cup of coffee. Finding no restaurants open he decided to go to the refinery where he worked, and visit a family of foxes that lived in the storage area. When he arrived at the storage area he systematically opened several valves at the site and shot a flare into the escaping oil, starting a blaze that took hours to extinguish.

Coxhead had a history of arson and had served a short jail term while in the Armed Forces at the Trenton Armed Forces Base. This history failed to appear when he was hired by Texaco. Coxhead also had a history of heavy drinking and had been drinking the night of the fire.

Coxhead's actions resulted in the destruction of storage tank #709 and the loss of approximately 1.3 million gallons of stove oil. Because the blaze threatened to spread to the surrounding residential area, 1,000 people were evacuated, including the residents of a nursing home. It has been reported that one resident suffered a heart attack due to the stress of the situation.

The fire did not spread beyond the Texaco site and damage was confined to the immediate area around the storage tank and pumping station.

When the fire was eventually extinguished at 11:46 a.m., damage estimates for the Texaco plant were in excess of $2.7 million including clean-up costs, emergency equipment costs, federal aid expenditures, and food supplies.

Background

The Texaco storage site on Lakeshore Road in Port Credit, Ontario, was built in the early 1950's on six acres of industrially zoned property. At the time, there were no housing developments in the immediate area and the plans for the Texaco plant were in full accord with all municipal zoning regulations.
A group of citizens who tried to stop the building of the storage facility was ruled down because the land was industrially zoned and plans met all municipal standards. At that time, Ontario had no laws regulating the storage of gasoline and/or other refinery products. In 1968 the Gasoline Handling Act was passed, which regulated retail outlets and bulk storage facilities. It also prohibited the construction of any gasoline storage facility without advance approvals from the Ministry of the Environment. This did not apply to refinery sites. To gain approval from the Ministry of the Environment the storage site must have a dyking system capable of holding 10 percent more than the largest tank it serves. Because Texaco is a refinery site and not a bulk station, it is not required to be licenced by the Ministry of the Environment as are the retail outlets and bulk storage facilities. It is required, however, to subscribe to the standards of the Gasoline Handling Act, specifically Section 35 (relating to the aforementioned dyking system). It is not obvious that there is any way to ensure that refinery sites do meet the existing standards, as the Ministry of the Environment does not police the sites. This is an issue that may need further research.

It should be noted that the Texaco plant does meet these standards and in many cases exceeds them.

To date, the housing developments that have moved steadily closer to the refinery have had not major inconvenience from their proximity to the storage tanks. This is not to say that homeowners have not been aware of the danger. In 1958 a fire at the plant, caused by a worker who neglected to follow standard operating procedures, caused extreme damage and resulted in two fatalities. While the 1958 blaze was not of the same magnitude as the October 2, 1978 fire, the same dangers were equally present.

More recently, a refinery fire at Gulf Oil of Canada Limited in Clarkson, Ontario, a few miles from the Texaco plant, made the threat of fire more of a reality to those living close to a refinery site. However, people still tend to push the issue out of their minds. One resident who was evacuated from the Kane Road area of the Texaco fire said that he "thought the oil that was stored at the site could not burn." Another said that he "had been aware of the danger when they first bought their home but that with time he had just forgotten that the tanks were there."

There is a marked resistance by residents to reappraise the risk involved in living so close to the site of a refinery. This same resistance became apparent the night of the fire as many residents would have chosen to remain in their homes if they had not been requested to leave. This resistance to reappraise the circumstances seems present in many areas of disaster response. Both the Metro Fire Department and Texaco fire fighting personnel increased forces in small increments. The Fire Department has said that this is standard operating procedure, but the concept of resistance to reappraisal should be considered.

Methodology

The decision to follow up on the impact of the Texaco fire was made at a meeting held the same morning as the incident was occurring. The decision was made to follow the communication flows that existed during the emergency. While communications was the direct basis for our questions we were also hoping that we would be able to unravel the coordination linkages that existed during the response time. We also felt that we were on safer ground asking for information about communications as this is usually less inhibiting than questions about coordination.

After the decision was made to look at the fire in terms of a mini-case study of communication of information during emergency situations, the first step was to determine who exactly was involved in the communication process and what method of contact we should use. Key actors in the fire fighting operations were identified in newspaper articles. By canvassing three major Toronto papers it was possible to get the names of key people at Texaco responsible for the fighting of the fire; the municipal fire chief in charge; the police inspector on duty at the time of the fire; government officials who were present; Red Cross personnel and other service groups. For this sort of study newspaper research was the most expedient manner in which to determine who the initial contacts should be.

The second step in the study was to contact the newspapers who had been running stories about the fire and to ask to speak to the reporters who had been responsible for covering the stories. It was felt that these reporters would have more knowledge of who would be the best people to talk to in the three different sectors represented; government, industry, and private. This
approach proved to be a dead end as the reporters could not be located and the newspapers seemed to be very reluctant to speak with anyone about the incident. It was not possible at that time to obtain any information other than what had already been printed. In light of the arson charges that had been laid, reluctance to discuss the case is understandable.

Using the names obtained from the newspaper articles, all of the people that had been mentioned as key individuals were contacted by phone to ask who else might have relevant information about the fire. This process was cumbersome without some sort of prior identification of the Emergency Planning Project group to the agency involved. The first day after the fire all government officials were unavailable for comment or to give information. The Emergency Planning Officer was out of town on a business trip. The Mayor was not available, nor were the Regional Chairman or his alternate. Representatives of the Texaco plant would talk on the phone about the possibility of setting up an appointment but were reluctant to speak of the fire until some time had passed and they had had time to discuss the issues involved with the officials at the plant. Spokesmen agreed to discuss and report on the fire one week later when they felt they would have more time to spare and a more complete account of the event.

The police department was more than willing to discuss their role in the fire and an appointment was made immediately to discuss the communication linkages with the on-site officer in charge, Lieutenant Graham Hills.

The fire department was neither willing to talk during the first few days, nor to arrange an appointment later on during the week. An interview was promised approximately ten days after the incident, and was eventually arranged with Gordon Bentley of the Fire Department on January 2, 1979.

The Red Cross kept the most accurate account of the events that happened that night. They have a log of phone calls and communications that they made and anticipate writing a full report of the emergency. The Red Cross in the past few years have become increasingly conscious of the need for trained personnel and emergency procedure drills to deal with emergencies of this nature. It is from the Red Cross records that information concerning many of the cross-links between different agencies have been drawn.
By use of the telephone, arrangements were made to interview all the major officials (except for the Mayor).

The interviews ranged from one hour to three hours depending upon the schedule of the person being interviewed and the amount of information that the individual seemed willing to share. The interviews were informal with very few prepared questions. After initial questions about contacts and times the person being interviewed led the interview in whatever direction seemed relevant. This proved to be a very effective means of determining the issues about the incident that seemed of most concern to the interviewee.

After the interviews were completed they were written up and analysed for information about communication flows and response mechanisms. The flow charts presented in this report reflect the events as they were reported by different individuals. An effort has been made to reduce a complex set of information into straightforward diagrams, especially where disagreements existed between individuals as to the time sequence of events. Conflicting sets of information were reconciled by telephone calls requesting clarification.
1:00 a.m. Fire set by Thomas A. Coxhead

1:10 a.m. Trans-Northern Pipeline Co. notifies Texaco pumphouse of fire

1:20 a.m. Texaco pumphouse crew radios guardhouse to send out emergency alert

1:22 a.m. Emergency alert system activated

1:32 a.m. Bell Canada operator calls Mississauga Fire Department

1:34 a.m. Peel Regional Police called by a citizen on Kane Road

1:36 a.m. Peel Regional Police call Mississauga Fire Department

1:38 a.m. First Fire Department vehicles arrive on the scene

1:49 a.m. Assistant Deputy Warner takes charge of the fire fighting operations outside the refinery. Inside, Texaco crews are in the command position

2:00 a.m. Police start to evacuate the surrounding area

2:20 a.m. Inspector Graham Hills arrives at the Texaco plant as the police officer in charge of police actions

2:50 a.m. Gulf Oil called by Texaco senior personnel as part of the mutual aid agreement

3:00 a.m. Red Cross notified by the police

3:15 a.m. Shell called by Texaco senior personnel as part of the mutual aid agreement

3:40 a.m. British Petroleum called by Texaco senior personnel as part of the mutual aid agreement

4:00 a.m. Evacuation of surrounding residential area complete

6:58 a.m. Chief Ken Mills of Toronto International Airport calls the Mississauga Fire Department to offer any assistance that is needed

7:20 a.m. The foam truck that Ken Mills had offered from the airport arrives with airport personnel

8:30 a.m. Evacuees returned to homes south of the railway lines

9:30 a.m. Ken Mills requests help from Downsview - 1 foam truck & personnel Time of arrival unknown

9:46 a.m. Ken Mills requests help from Camp Borden - 1 foam truck, 1 stake truck & personnel. Time of arrival unknown

11:46 a.m. Fire extinguished
Police Department Response

Inspector Graham Hills was the on-scene police officer responsible for the coordination of police activities at the scene of the Texaco fire. The response of the Peel Region Police has been reconstructed from his account of the fire.

Inspector Hills was on duty the evening that the fire at the Texaco plant was reported. The first call that the police department received was from an operator calling on behalf of a citizen in the Kane Road area. (See Figure 1). The call was received at the police headquarters communication centre at 168 Kennedy Road South in Brampton, approximately 30 miles from the actual fire. This call was received at 1:34 a.m., October 2, 1978. The communications centre alerted Inspector Hills and dispatched a patrol squad with car from number 12 division (the Streetsville division) to survey the area and assess the situation. Upon reporting back that the fire was hazardous to life and property and that help was needed, Inspector Hills activated two more divisions to deal with the emergency (11 & 21). Inspector Hills left immediately for the site from his Brampton location. Simultaneously, the patrol squad was setting up road blocks in the area to insure that emergency vehicles and personnel would have free access. The police communications centre in Brampton was also alerting the additional divisions, the Mississauga Fire Department and the ambulance services. Inspector Hills was operating under procedures which had been outlined in the Regional Police Disaster Plan. Inspector Hills did not activate the entire plan, as he felt the emergency did not warrant this step, but he selectively followed its guidelines in activating certain emergency procedures, e.g. calling ambulance services, setting up road blocks, evacuating endangered persons and providing policing at the evacuated homes.

While Inspector Hills was in transit to the emergency site, Sgt. R. Gilmore, a police supervisor, decided to evacuate residents in the Kane Road area and other surrounding developments. (See Figure 1). This included approximately 1,000 people, including the residents of the Tara nursing home and the Credit Village Square Apartment complex. This evacuation was complete by approximately 4:00 a.m. and the evacuees had been sheltered in the Port Credit Arena, the Port Credit Library and Riverside School.
FIGURE 1
LAKE ONTARIO
EVACUATED AREA
Inspector Hills arrived on the scene at approximately 2:20 a.m. and took charge of directing the efforts of 11, 12 and 21 divisions (approximately 50-60 men). Inspector Hills was in constant touch with the communications centre in Brampton. From the Texaco site he directed calls to the Board of Education to open Riverside School, to the Peel Parks and Recreation Department to open the Port Credit Arena and to the Library Board to open the Library for emergency housing and shelter. All communications to and by the police should have been relayed through Inspector Hills.

During this emergency the police were responsible for the evacuation of the immediate area and making sure that the evacuees had been safely situated. They were also responsible for the closing of traffic routes where necessary to insure that emergency vehicles had clear passage. Patrolmen covered the area to protect homes and property from looters and to insure that crowds of onlookers did not hinder the fire fighting operations. Disasters create situations in which volunteers and onlookers converge on the site of the emergency, hindering the removal of the risk. In this case, police were able to control spectators but a problem of an excess of volunteers has been noted. At no time were the police aware of the number of volunteers, nor were they in a position to control the numbers in attendance.

Police remained on the scene until the fire had been extinguished and the evacuated people had been returned to their homes, at approximately 11:46 a.m.

It is important in looking at the police response to the fire to note that the emergency plans of Peel Region were never implemented. If they had been, the Police Department would have been the lead agency in coordinating the activities at the scene of the fire, as outlined in the Peacetime Emergency Plan, Regional Municipality of Peel:

"Where the situation cannot be adequately dealt with under the existing division of statutory responsibilities the Regional Chairman may, at the request of the mayor of the affected Area Municipality, coordinate and control all services both of the Region of Peel and the Area Municipality required to deal with the emergency and provide such additional Regional services to such Area Municipality as may be required. However, where police action or investigation is required, the responsibility and control in the area will remain with the Chief of Police or his designate and the police action will be coordinated with the other services."
This would have included all services as outlined in Figure 2.

The Emergency Plans of Peel Region were never implemented and therefore the Police Department acted under their own directives. Coordination of vital services is a key element in the Police Disaster Plan and therefore even without the implementation of the regional plans, the Police Department acted as a coordinating group as well as a policing agency. This can be seen by following the order of events in Figure 3. Of all the interviews that were done, it was the Police Department who had the most complete description of events that occurred on the night of the fire. It had the most comprehensive awareness of the elements of participation, response, and coordination.

The only regret or dissatisfaction that was expressed by Inspector Hills was the fact that a running log had not been kept of the events by the communications centre. If the police disaster plan had been implemented this would have been done, but because it was not there was no directive issued to keep a log. Inspector Hills has indicated that this emergency has made him aware of the need for a continuous log of all such events. Such a log facilitates a more critical evaluation of response to emergencies and indicates both strengths and weaknesses in the emergency response system.
Figure 2. Emergency Procedure: Responsibilities as outlined in the Peacetime Emergency Plan for the Regional Municipality of Peel

Chief Administrative Officer
Cyril Henderson
- coordination of all operations
- release of public information

Chief of Police
- implement Regional Police disaster plan
- control, crowd dispersal, evacuation
- traffic control
- looting control

Commission of Public Works
- engineering support to municipalities
- liaison with fire coordinator
- liaison with medical health officer

Fire Coordinator
- search and rescue of trapped persons
- fire fighting
- liaison with the Fire Marshall of Ontario

Emergency Planning Officer
- provision of radio communication to site
- provision of two-way radio communication
- arrangement of emergency equipment supplies

Medical Health Officer
- coordinate medical health services
- first aid in disaster area
- potability of water

Commission of Social Services
- operation of welfare centers
- assistance from volunteer agencies

Commissioner of Finance
- direction and development of a disaster relief committee
- procurement in emergencies
- emergency telephone and switchboard service

Regional Clerk
- clerical staff to assist control groups
- maintain log of proceedings

Mayor Ron Searle
Authority Figure
within Area Municipality (initial & primary responsibilities)

Regional Chairman Lou Parsons
Authority over all of Peel Region Coordination & Control of Services

Communications Center
1. Regional Alert
2. Emergency Operations Control Group
1:34 a.m. 2.10.78
Peel Regional Police (Brampton) notified of fire by a citizen living on Kane Rd.

Police communications Centre at Brampton dispatches #12 division (Streetsville) to assess situation

2:20 Inspector Hills arrives on scene and maintains contact with communications centre.

Patrol cars sent to assess the need for road blocks and evacuation

Patrol Sgt. radioed to request other vehicles

Evacuation started
Road blocks started

Division 11,21 are called out to respond 50-60 men

Calls M.F.D.

Ambulance Services called

Positioned ambulance at evacuation site

Red Cross called

Catering Services
Board of Education
Parks & Recreation
Library Board
called to open facilities.

Figure 3. Police Department Response Chart
Fire Department Response

The response of the Mississauga Fire Department was initially reconstructed from secondary information sources. The Fire Department was reluctant to speak with anyone about the fire due to the arson investigation which was underway. It declined a meeting until after the Ontario Fire Marshall's report had been completed. The information for this account has been supplied by Gordon Bentley of the Mississauga Fire Department.

The Mississauga Fire Department was called by three different people within a matter of minutes. At 1:32 a.m. it was called by a private citizen living in the vicinity of the Texaco plant reporting a fire 'somewhere in the area'. Simultaneously—on a different line—it was called by a Bell Canada operator who reported a fire on 'King' Road; and, at 1:34 a.m., it received a call from the Peel Regional Police. Neither of the private calls had indicated the location of the fire and only one pumper truck had been dispatched to cover the area and locate the fire. When the police called and identified the site, the routine amount of equipment was dispatched—two pumpers and squad car.

District Chief McKee requested an additional pumper truck (#9) and also aerial #7 after seeing the blaze from the highway before he arrived. He also requested by car radio that Assistant Deputy Arthur Warner take command of the operation. Arthur Warner arrived on the scene at 1:49 a.m. and as the intensity and severity of the blaze became apparent he requested additional aid. The incremental addition of manpower and equipment reflects standard operating procedures of the fire department and does not necessarily indicate underestimation of the problem.

Because the Texaco plant was so close to the C.N.R. tracks, officials of C.N.R. were called by the fire department and asked to remove tank cars that were in danger of catching fire. C.N.R. also discontinued rail traffic along that stretch of line.

It became apparent very early in the course of the fire that Mississauga Fire Department and Texaco plant personnel were not going to be able to handle the fire by themselves. What should have been a routine procedure became complicated by the failure of a shut-off system to stop the flow of oil to the
source of the fire. Attempts to smother the fire under foam were unsuccessful because the gushing oil from the pumps washed away the foam before the fire could be extinguished. If the shut-off system had worked the only fuel to have burned would have been that released by the arsonist. Because the system failed, standard procedures and equipment were not adequate.

At 2:50 a.m. mutual aid was activated by Texaco officials, and because Texaco personnel were in a sense the 'lead' fire fighting group, they directed the operations including those of the Mississauga Fire Department. The combined efforts of Gul Oil Co., Shell Canada Ltd., British Petroleum and Texaco, as well as the Mississauga Fire Department, were still unable to extinguish the fire.

At 6:50 a.m. Chief Ken Mills from Toronto International Airport called the Mississauga Fire Department and offered the help of the airport foam truck. While there is no written accord between the Mississauga Fire Department and the airport, Toronto International lies within the city limits of Mississauga, and on occasion the Mississauga Fire Department has given assistance to the airport fire fighting teams. It is an unwritten mutual aid agreement. The airport truck and personnel arrived at 7:20 a.m. Still the equipment was not adequate to bring the fire under control. At 9:43 a.m. additional assistance was requested from the Canadian Forces Base at Downsview and Borden by Chief Mills. They responded with large foam trucks and additional manpower. These foam trucks were to be used to contain and extinguish the fire. Due to exhaustion of foam supplies, trucks had to wait for additional foam just as the fire appeared to be going out. This caused a delay of approximately 1½ hours in putting out the fire as well as extending the risk time. Whether or not the extent of the damage was increased by this delay can only be speculation.

The fire was extinguished at 11:46 a.m.

Mississauga Fire Department has its own standard operating procedures for coordinating its own manpower. In the case of the Texaco fire, however, Mississauga Fire Department took a backup position in fighting the fire within the confines of the plant. It followed the directions of Texaco personnel who were felt to be better acquainted with oil fires and their handling. Outside
the plant, Mississauga Fire Department took the lead role in coordinating its own activities and those of the assisting Texaco personnel to protect the lives and property of nearby residents. Mr. Ed Chandler (Texaco Plant Fire Chief) coordinated efforts on-site; while Arthur Warner coordinated the off-site response.
Assistance given to the Mississauga Fire Department

**Source:** Report: Texaco Fire October 2, 1978, Emergency Planning Office, Peel Region.

<table>
<thead>
<tr>
<th>Mississauga Fire Department</th>
<th>Pumper Nos. 1, 4, 24, 3, 9, 28, 21, 6 Mini Pumper - Foam supply and hose Cars No.s 1, 2, 4, 5, 7, 8 Aerial No. 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gulf Oil</td>
<td>Call Time: 0250 hours Reported: 0301 hours Manpower: 29 men Foam Truck Chemical Boss Foam Tanker</td>
</tr>
<tr>
<td>Shell Oil</td>
<td>Call Time: 0250 hours Manpower: 29 men</td>
</tr>
<tr>
<td>British Petroleum</td>
<td>Call Time: 0340 hours Responded: 0410 hours Manpower: Initially 6 men 3 men Foam Truck Foam Tender</td>
</tr>
<tr>
<td>Texaco Nanticoke</td>
<td>Manpower: 7 men (1) 3000 lb. chemical boss</td>
</tr>
<tr>
<td>Texaco Mississauga</td>
<td>Foam Truck Trailer pumpers Several 300 chemical tanks Foam</td>
</tr>
<tr>
<td>Toronto International Airport</td>
<td>Call Time: 0650 hours Responded: 0720 hours Manpower: 2 officers 2 firefighters Various trucks supplying foam</td>
</tr>
<tr>
<td>Canadian Forces Base (Downsview)</td>
<td>Call Time: 0930 hours Departed: 1315 hours Manpower: 1 warrant officer 3 firefighters Foam Truck</td>
</tr>
<tr>
<td>Canadian Forces Base (Borden)</td>
<td>Call Time: 0943 hours Float arr: 1330 hours Departed: 1515 hours Manpower: Chief warrant officers 5 firefighters Foam Truck Stake Truck</td>
</tr>
</tbody>
</table>
1:32 a.m. 2.10.78
1. Bell Operator
2. Citizen
Calls to F.D. to report fire.

Miss. F.D. responds to calls. Sends approx. 70 men.
Dispatched Pumper 3 and 4, squad #2

District Chief McKee requests Pumper 9 and Aerial 7
Asst. Dept. Art Warner requested to control site

C.N. responds to request to move tank cars
Etobicoke F.D. send men and equipment

Ken Mills of Malton other assistance to Mississ. F.D.
Sends foam truck

Ken Mills requests help from Downsview

Ken Mills requests help from Bordon

Figure 4. Mississauga Fire Department Chart
A Texaco Perspective

Charles Ramsey is the plant manager at the Texaco tank farm located on Lakeshore Road in Port Credit, Ontario. It is his responsibility to account for the overall functioning of the plant, and the following account is based on an interview with him.

The Texaco tank farm has an elaborate communication system set up to deal with emergencies such as the fire which occurred on October 2, 1978. The Texaco emergency response to the events of October 2 was in keeping with Texaco Emergency Preparedness Plans, and was coordinated in the manner directed by that framework.

Because there was no one at the scene when the fire started, it has been necessary to estimate that the fire started at approximately 1:00 a.m. An employee of the Trans-Northern Pipeline Company telephoned a message to the Texaco pumphouse at approximately 1:10 a.m. to report that a fire had been noticed at the storage tank at the corner of Kane Road and the C.N.R. tracks. Two of the pumpers immediately left the pumphouse in a truck equipped with fire extinguishers and drove toward the reported site.

When the driver came into view of the fire he realized that the extinguishers would not be adequate to deal with the now blazing tank and radioed back to the guardhouse to alert the security personnel to sound the alarm.

The guardhouse is equipped with an alarm mechanism that sets off sirens in the plant, around the perimeter and also in the homes of ten senior officials of the Texaco Company. It also alerts an operator who in turn alerts a second operator, and together they complete a list of emergency phone calls to Texaco fire fighting personnel. The Texaco alert system is not tied in to the fire department or the police department.

Edward Chandler, one of the ten officials alerted by the emergency system, called Gulf Oil at 2:50 to request assistance as outlined in a mutual aid agreement* between Texaco, Gulf, British Petroleum and Shell Oil Co. of Canada Limited. Also alerted were Nanticoke Texaco, Shell in Sarnia, foam supply

* Mutual aid agreement provides for the four major oil companies in the area to assist each other during emergency situations.
companies in the area and Mississauga Hydro.

Forty-two Texaco personnel as well as sixty men from the mutual aid agreement worked to contain the fire, in addition to the Mississauga Fire Department.

The Texaco response to the fire was immediate and well coordinated. Within 12 minutes Texaco officials and fire fighting crew were on their way to the scene of the fire. Mississauga Fire crews were not notified of the fire until 1:32 a.m., 22 minutes after the fire had been reported to the Texaco pumphouse. The Fire Department was never alerted by Texaco, but responded to private calls received at 1:32 a.m.*

* Since the fire, Texaco has considered revising its standard operating procedures to include the Fire Department in its emergency alert system. Prior to the fire, Texaco preferred to handle all fires by themselves whenever possible. Alerting the Fire Department as standard operating procedure would have made that difficult, as well as raising the public awareness of the risks involved in living close to the refinery. In retrospect, Texaco is perhaps weighing the impact of increased public concern against increased fire protection. Plans have not been formalized to date.
Services Contacted by Texaco Personnel During Emergency

**Safety Supply Company** - Toronto
- Foam Supply

**Wilson Cousins** - Brampton
- Foam Supply

**Miller Dyer/(3M)** - London
- Foam Supply

**Miller Dyer** - Weston
- Foam Supply

**Marshall Equipment**
- Mr. Barry Trout
  - 4" hose & fittings

**Levitt Safety** - Toronto
- Foam Supply

**Brampton Fire Department** (Fuel)
- 50 gallons - pick up of fuel on request of Peel Regional Police

**Gulf Oil**
- 2 Tankers - Fuel
  - 1 Diesel
  - 1 Gasoline

**Bramall Paving (for City of Mississauga)**
- Fuel

**Mississauga Transit**
- Bus Fire Personnel to scene of fire and to shift change

**Peel-Halton Ambulance**
- Allen Duffin
  - 2 Ambulances and crews

**Metro Ambulance**
- Ambul Bus

**St. Stephens Church** (Indian Road)
- Coffee and food

**A. & W. - Port Credit**
- Coffee

**Charleys - 2 locations**
- Coffee - orange juice

**Catering Services**
- Sandwiches, coffee, donuts

**Red Cross**
- Coffee, sandwiches, First Aid, etc.

**Source:** Report: Texaco Fire October 2, 1978,
Emergency Planning Office, Peel Region.
1:10 a.m. 2.10.78
Trans-Northern Pipeline Co. reports fire to Texaco pumphouse

Texaco pumphouse alerted by T.N.P.C. Pumpers proceed by truck to reported site

Radioed from truck to the guardhouse to activate the Emergency Warning System 1:20

Telephone answering service calls 2 other operators with call-in lists to alert fire crew 42 people

Fire Crew arrive at Texaco approx. 1:38

10 senior officials are alerted by in-house buzzer followed by phonecalls 1:22

Mutual Aid called by Texaco
- Gulf
- B.P.
- Shell
60 men

Called Nanticoke Texaco

Shell in Sarnia called but not activated

Foam Supply Co.

Mississauga Hydro

Figure 5. Texaco Response Chart
Red Cross Response

Mrs. Leslie was the first Red Cross representative to be called for aid at the Texaco fire. She coordinated the Red Cross response at the scene of the fire and also at the evacuation centres. An interview with Mrs. Leslie has helped to reconstruct the Red Cross response.

Mrs. Leslie received a call at 3:00 a.m. from the Red Cross answering service in Mississauga to alert her of the need for Red Cross volunteers at the site of the fire and also to set up the various evacuation centres that would be needed for the evacuated people. This call was placed by the Peel Regional Police Department, from their communications centre at Peel Regional Police Headquarters in Brampton. Mrs. Leslie immediately called her own area people (Mississauga Volunteers) and also called for volunteers from Oakville and Etobicoke. After placing these calls she went to the fire site to assess the situation and determined that the incident was of greater proportions than could be handled by the immediate personnel. She proceeded to place a call to Mr. Ken McBride, head of the Ontario Division, requesting more help and relaying the proportions of the situation.

Mrs. Leslie then proceeded to supervise the setting up of the Port Credit Library as an evacuation centre with Mississauga volunteers providing the manpower. These volunteers provided blankets and food as well as organizing a sign-in operation to keep track of the evacuated for later use. Unfortunately, this sign-in procedure stopped as the pace became more hectic, and an accurate record of evacuees and locations of evacuation is not available. The volunteers at the library also took charge of answering the phones to give as much information as possible about both the fire and the whereabouts of evacuees. The task of keeping accurate records of displaced persons is one that was not officially designated to one person or one group. For this reason there was a breakdown in the system --those not specially designated for a task move to "higher priority" tasks in stress situations.

Mrs. Leslie left the library and went on to the Port Credit Arena after the library was working properly. The Arena was also opened at the request of the Police Department as an evacuation centre. The arena was manned by Etobicoke volunteers, and was set up in a similar fashion to Port Credit.
Ken McBride had by this time called in the North York and Toronto Central Divisions of the Red Cross. Felicity Powell and the North York Volunteers remained on the scene at the Texaco plant to deal with the problems and needs of the firemen.

Toronto Central branch was stationed at the Port Credit Pool Club in case it too was needed. Apparently there was little communication between the police coordinators and the Red Cross. After the incident, police were not aware that more than one branch of the Red Cross had been present and they were also not aware of the person coordinating the Red Cross services.

Once again it is important to point out that this public service agency operated under its own emergency plans without the coordination of a lead figure. The Red Cross remained a very organized group, functioning well under the stress of the situation. It is unfortunate that there was no central coordinator of all the emergency services in that some of the efforts of the Red Cross were duplicated by other groups, for example St. Stephens on the Hill, a United Catholic Workers group. At no time was the police department aware of the number of Red Cross personnel nor of their origin. It is possible that there were more Red Cross personnel than were needed, and the excess of people actually hindered the situation.

The Red Cross has its own well organized response mechanism and is prepared to assist at any emergency situation. It has become increasingly involved in situations of this sort, where rapid mobilization is essential. Critically, perhaps the coordination of Red Cross services with other community groups would enhance the response mechanism and its effectiveness.
Ken McBride reached at home. Contacts other branches to respond. 3:30

3:00 a.m. 2.10.78
Mrs. M. Leslie of Mississauga R.C. notified of fire

Notifies Mississ. volunteers as well as Etobicoke, Oakville

Went to site to assess the situation. Placed a call to Ontario Division R.C.

2.58 a.m. 2.10.78
P.R.P.D. calls R.C. answering service

2.10.78 P.R.P.D. calls
R.C. answering service

Mississauga volunteers open the library as an evacuation centre

5:15 Toronto Centre asked for aid.

5:10 Felicity Powell of North York is notified to send volunteers

N.Y. volunteers stay at scene

Port Credit Pool Club opened in case it's needed

Etobicoke and Oakville provide equipment and personnel.

Figure 6. Red Cross Response Chart
Conclusions

Peel Region drew up peacetime emergency plans approximately five years ago as directed by a Peel By-Law (55-74) mandating the emergency measures officer to establish an emergency measures programme. The plan has been updated each year as the "emergency environment" becomes more defined.

The plan uses a working definition of emergency that is flexible and broad. It defines an emergency situation as one which:

a) "could abnormally affect lives, property
b) could require controlled and coordinated response by a number of agencies
c) distinct from routine operations."

Although at least 3 events up to the time of writing (January 1979) have occurred which might have justified the implementation of the plan, i.e.

1) Malton DC-9 crash (June 1978);
2) Severe snowstorm (January 1978);
3) Texaco fire (October 1978);
the plan has not been formally implemented.

The primary purpose of the plan is the coordination of the separate response agencies in such a manner that the emergency is dealt with as rapidly and as efficiently as possible. Implementation of the plan should guarantee this effort, and also that tasks are neither overlooked or duplicated. Further, the plan envisages a broadening of the control function through the creation of the Emergency Operations Control Group (EOCG), made up of the directors of the response agencies and the senior elected officials of the area (e.g. the Peel Region Chairman, the Mayor of the affected municipality).

Looking back on the Texaco fire, it becomes obvious that without the implementation of the plan an emergency was handled in reasonable time with ample manpower and in a coordinated, well structured fashion.

* The Regional Municipality of Peel - Peacetime Emergency Plan, p. 4
The question then arises - What effect would the implementation of the plan have had on the handling of the emergency? Would it have made a difference if the plan had been put into action?

Both the Fire and the Police Departments have commented that the Texaco fire was handled in the most expedient and effective way possible. Implementation of the plan would not have shortened the response time, and in some cases might have lengthened the time required to clear certain actions and requests for assistance. If the Fire Chief had had to convene and seek permission of the Emergency Operations Control Group before accepting Federal assistance, serious delays might have occurred.

Officials at the regional level have said that there is reluctance to implement the plan because of the public perception of an "emergency". It has been said that declaring an emergency in the region might cause needless anxiety. In the case of the Texaco fire, it was felt that implementing the plan might have cause panic among the nearby residents.

Be that as it may, it is clear that something of the plan was implemented. Mississauga Mayor Ron Searle, on the scene with Peel Region Chairman Lou Parsons, paid credit to emergency services, saying: "We have a contingency plan for disasters of this nature, and everyone worked together to put it into effect...it worked superbly." In other words, the organisation and distribution of powers as outlined in the plan were put into effect, as the natural result of the stresses of the situation. What was not put into effect was the political machinery of the EOCG.

Why? First of all, the emergency was perceived to be under initial response agency control within a few short hours of mobilisation. Second, the incremental nature of the increased need for resources precluded any "threshold" at which it would have become obvious that major political initiatives and re-organisations had become necessary.
There is also a certain amount of resistance to coordination once an emergency has exhausted local capabilities. While members of the same community are working together for a common cause, coordination seems to come naturally. However, when different levels of government become involved (e.g. local, municipal, regional, provincial, federal) there is a resistance to coordination that seems to stem from group affiliation. The concept of working towards a common goal becomes obscured by the necessity to follow your own group's plan.

If this resistance to coordination and reluctance to implement emergency plans is common to all emergencies we must ask if it makes sense to have emergency plans at the regional level, or at any other level beyond primary response organisations, e.g. fire department, police department?

What we are faced with is a set of pros and cons in terms of municipal emergency planning. Compiling comments made during the investigation one can compare the positive and negative effects of not implementing the emergency plan and not dealing with the fire in the structural framework of the plan.

<table>
<thead>
<tr>
<th>PRO</th>
<th>CON</th>
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<tbody>
<tr>
<td>1. There was no time delay while waiting for the appropriate representatives to form the Emergency Operations Control Group.</td>
<td>1. There was no one organizing body to keep track of manpower and equipment to prevent overlapping or neglect.</td>
</tr>
<tr>
<td>2. Manpower and equipment requested by each individual agency as needed without waiting for OK's or funding approval.</td>
<td>2. Assessment of responsibilities, liabilities, and costs might have been less confusing.</td>
</tr>
<tr>
<td>3. Public alarm not aroused.</td>
<td>3. Proper public evaluation of risks involved may have been hampered by inadequate definition of level of emergency response.</td>
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<tr>
<td></td>
<td>5. Too many volunteers on hand may have hindered fire fighting operations.</td>
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<tr>
<td></td>
<td>6. No accurate account of fire - no running logs kept - no registration of evacuees</td>
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Perhaps what becomes most apparent from this analysis is that if the emergency plans of Peel Region are not to be declared as implemented in such a case as the Texaco fire, then what is needed is a closer coordination of the individual plans of municipal response agencies—taking into account the fact that the political portion of the plan is only likely to be proclaimed in force for emergencies of long duration or devastating impact. If police departments, fire departments, Red Cross, etc., could arrange to have their plans complement each other—thereby ensuring that they are aware of each agency's responsibilities and capacities—then the overlapping and neglect of certain tasks might be avoided in future.

Questions for further research arising out of this case-study might include the following: would municipal emergency plans be more efficiently and effectively used if they were organised around a two-tier response, namely an immediate response and a long-term response? Would a well-defined "threshold of implementation" for the long-term response smooth over the transition to higher-level control? Are municipal plans compatible with the plans of other organisations and governments? How can the volunteer and non-governmental agencies be integrated into the planning process? Should municipalities be more aware of the private emergency organisations (eg. the Texaco fire fighters) in their areas, and could they be integrated into the planning process?