where such expertise is required.

In addition, ministry regional staff have access to portable air monitoring equipment which can measure for specific pre-set compounds.

Cleaning up

After the situation is under control, the ministry's staff ensure that the spill is cleaned up by the discharger, following approved procedures for recovery and/or disposal of the spilled materials. The field officer ensures that the discharger complies with the ministry's waste handling and disposal requirements. The officer also makes an initial judgment to determine if an offense has taken place and further investigation is warranted.

Staff document the incident, and obtain a report from the discharger on what happened and what measures may be taken to prevent a recurrence.

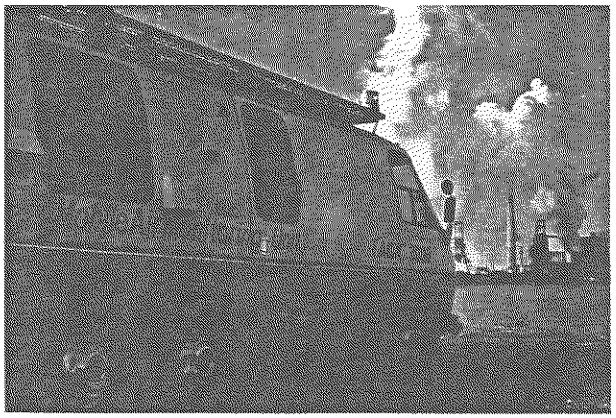
Many of the reports from the SAC involve complaints or situations of a less urgent nature. Field staff deal with these reports during regular working hours.

The 'teeth' in Ontario's environmental legislation

The "teeth" in Ontario's environmental legislation

Investigations and Enforcement Branch officers are empowered to gather information where it is believed an offence may have been committed under environmental legislation. They may obtain search warrants, seize documents, equipment, and/or material – and, where a violation is identified, they will lay charges.

Branch staff are available to respond either on an emergency basis or to a post-incident report. On arrival at the spill site, they search for any indications of negligence and, if evidence is found that suggests further investigation is needed, staff proceed with the full authority granted them under law.



Better information for better decisions!

Air Resources Branch staff provide data on chemicals, toxic gases, and meteorological conditions at the site.

Better information for better decisions

Air modelling or monitoring

Air modelling or monitoring

Staff are equipped with portable computers which provide access to a system of simple mathematical projects or models. Using this system, the specialist combines chemical information from on-site reports to the existing computer models of air dispersion patterns. This can provide quick predictions of toxic gas concentrations at various distances downwind from the emergency.

The Air Resources Branch also operates mobile air monitoring units. These units are capable of measuring for more than 140 different organic compounds. Although their response time is influenced by distance from the scene they can be used effectively during on-going spill emergencies.

Damage to plants and soil

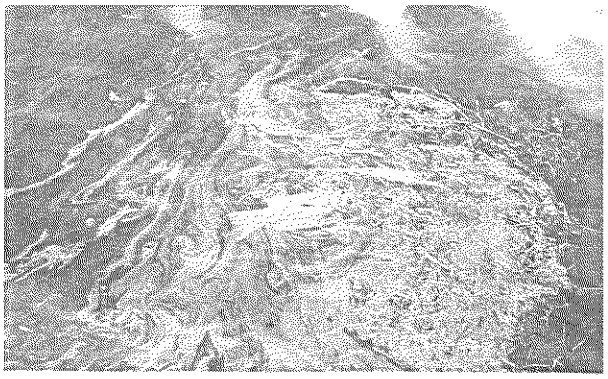
Damage to plants and soil

Air Resources Branch staff also investigate suspected damage to vegetation and soil and complaints from rural and urban areas involving forests, orchards, farm crops, or ornamental plantings. The scientific method used in these investigations, which is known as phytotoxicology, is also used in dealing with off-site effects of spills on crops, orchards and other vegetation.

The TAGA 3000, a state-of-the-art mobile air monitoring unit, capable of measuring 140 different organic compounds.

Predicting damage... avoiding harm

Drinking water safety



Predicting damage ... avoiding harm

When a spill enters or threatens Ontario's waterways, the Water Resources Branch can provide computer evaluations of a contaminant's anticipated movement and effects.

This information helps to identify potential danger and downstream water users to be promptly alerted.

Drinking water: safe or not?

Ontario has established a number of limits for concentrations of chemicals in domestic water. Relating the known data to these limits, the staff advise the responding agencies at the scene on what public safety action should be taken, and what treatment methods should be employed.

Providing technical back-up

Part of the responsibility of the ministry's main laboratory in Toronto, and regional labs in London, Thunder Bay and Kingston, is to test and analyze samples provided by the field staff at the site of a spill. Obtaining rapid, accurate information may be vital to on-the-spot decisions regarding public safety and cleanup procedures. Precise information will be essential in the event that legal action is taken as a result of the spill.

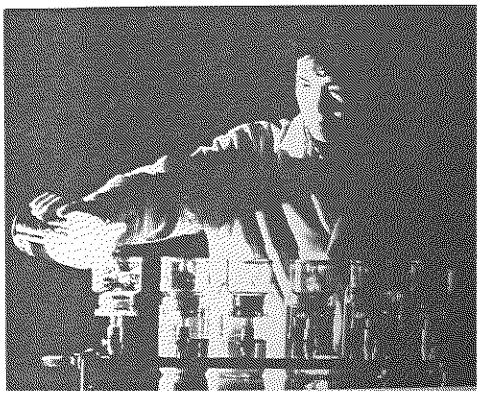
Providing technical back-up

Taking the lab to the spill

In some situations - particularly major spills – the logistics of reporting and sending samples create a time lag. In these cases, the mobile lab is dispatched to the site. The unit is equipped with on-board communications, power and water – with working facilities for up to three technicians.

On-site, the laboratory can provide a wide range of services including analyses of contamination from chemical spills

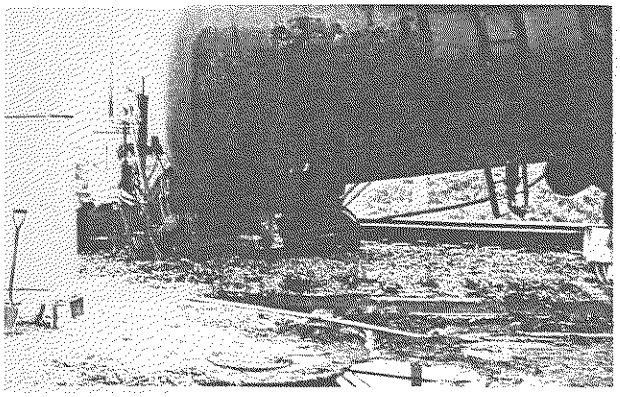
Taking the lab to the spill



Chemical data consulting services

Chemical data consulting services

The Hazardous Contaminants Co-ordination Branch maintains and develops extensive data on pesticides. In addition to the specific data on pesticides, the branch also maintains current information on a wide range of known chemicals which may affect the environment. Staff have access to a large bank of information on the toxicological, environmental, chemical and physical properties of a contaminant – plus recommended emergency and remedial action.



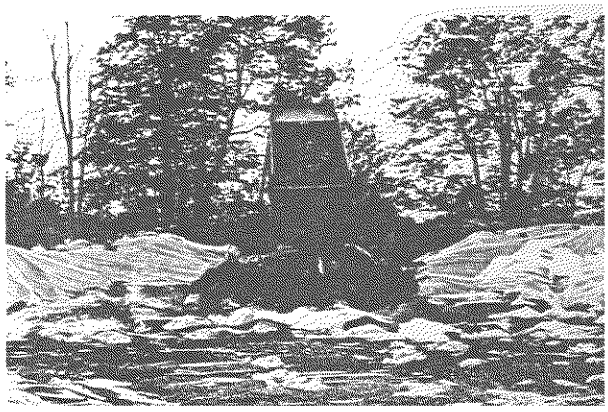
Determining the hazard of any spilled material is a primary concern for response personnel.

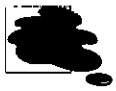
Now...what must be done with the stuff?

The principal role of the Waste Management Branch in spill situations is to provide advice on disposal of wastes and assist with decision-making at the scene. The decisions may relate to issues of contaminant and cleanup; but, primarily, the branch's concern is with safe transportation, treatment and disposal – can the material stay where it is... and, if not, where must it go and how must it be dealt with?

Disposal of wastes

A disposal site prepared with a liner for receiving contaminated debris from a major spill.



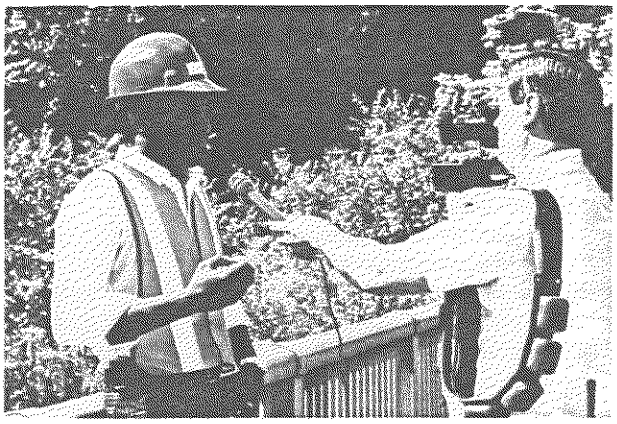


Informing the public

Informing the public

When spills occur, it is very important for the general public to have the latest information. Usually, it is provided by SAC, or by the ministry's regional staff

Large or serious spills, however, often require the assistance of one of the ministry's trained communications officers. A communications officer will be dispatched to the scene to assist in providing all the information the public needs.



Environmental Compensation Corporation

The Environmental Compensation Corporation (ECC) is an Ontario Crown Corporation established to receive applications for compensation from parties who have suffered loss or damage due to a spill, and to make compensation payments to such people. The ECC does not replace the role of insurance companies, nor does it lessen the legal responsibilities of those involved in a spill. However, the ECC can help where those sources of compensation are not available.

The ECC may also receive applications from owners or controllers that have had to pay compensation to spill victims but were not themselves at fault for the spill

Contacting the ECC

Those who have suffered damage due to a spill or spill cleanup activities should write the ECC as soon as possible. The ECC must be notified within 30 days of the spill or 30 days from when any loss or damage is first noticed.

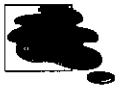
The types of damage which may be compensated include bodily injury, economic loss, damage to property, and cleanup costs.

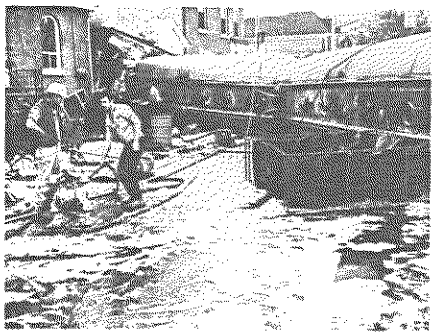
Insurance and other claims

Spill victims who have insurance which covers the loss or damage must claim payment from their insurance company.

Spill victims must also claim payment from all those responsible for the spill, including owners and controllers of the spilled material who may be legally responsible for paying compensation under the Act.

After giving notice to the ECC, spill victims should wait at least 30 days from the date of their last written claim to those responsible If they do not receive a fair and





reasonable offer during that time, they may then make a formal application to the ECC for compensation. The ECC will provide appropriate advice and application forms on request.

Information that the ECC will require includes type and extent of damage, estimates, receipts, medical reports, etc. - whatever evidence is required to help the ECC evaluate an application

A word of caution

If victims receive a settlement offer from the responsible parties which they believe is unsatisfactory, they must contact the ECC before they accept the offer or sign a release of their claim

Compensation from the ECC

When the ECC receives an application, it is evaluated and damages are assessed. The ECC will then contact all parties involved and give them another opportunity to settle. If they do not settle, the ECC will propose an appropriate amount of compensation after applying specified deductibles. Spill victims who do not accept this offer may apply to the courts for a review of the ECC's decision.

ECC and the owners and controllers

An owner or controller who is without fault for a spill may apply to the ECC for compensation for amounts paid out to victims; however, the owner or controller must first attempt to recover costs from those responsible for the spill. Compensation from the ECC is subject to a specified deductible

The ECC cannot compensate owners and controllers for damage to their own property or for the cost of cleaning it up.

Owners and controllers are liable for any damage caused by a spill. Should they fail to compensate victims, the ECC may make compensation payments and then take action against those liable, to recover the compensation plus any legal costs incurred.

Spill contingency plans for potential dischargers

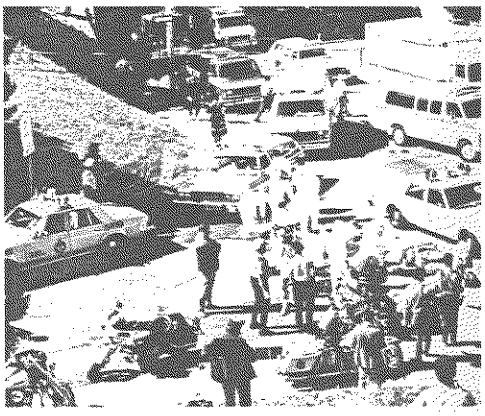
Spill contingency plans for potential dischargers

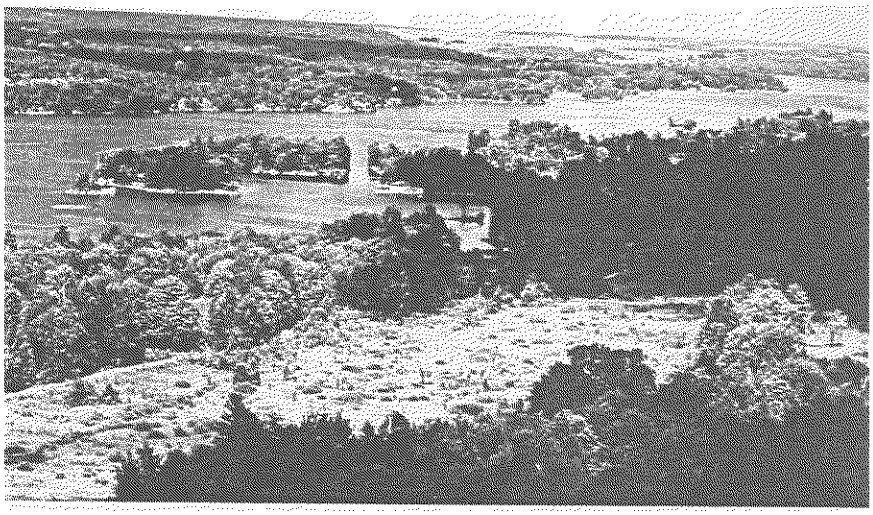
The ministry encourages those with potential for spills to develop spill contingency plans. Many companies and facilities with a potential for spills have taken direct steps to establish cleanup procedures, stockpile equipment, train their spill response staff or, in some cases, retain the services of a cleanup contractor.

In some industries with potential for spills, companies share resources – pooling data, equipment and expertise in response structures such as the Transport Emergency Assistance Plan of the Canadian Chemical Producers Association and the oil-spill co-operatives set up by neighbouring companies or established through the Ontario Petroleum Association.

In some situations, the ministry may order potential spillers to install spill detection equipment and spill prevention equipment and to develop spill contingency plans.

The core objectives of a spill contingency plan are to comply with all regulatory requirements and provide the





best response within the shortest possible time. An effective plan must include mechanisms for initiating and carrying out the required containment, cleanup and remedial actions.

A facility or an enterprise which recognizes its potential for spills should take three key steps:

1. Appoint a spill response planning co-ordinator.
2. Develop a contingency plan with community involvement and consistent with guidelines available from the ministry.
3. Schedule periodic training exercises in spill response – ideally, in conjunction with other response groups from the municipality and/or regulatory agencies.

Information on developing spill contingency plans is available on request from the ministry's regional and district offices or the Spills Action Centre. The ministry will review and advise on draft contingency plans submitted by industry or municipal authorities.