Hazardous Materials Incident Management in Washington State

Summary Report

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WASHINGTON STATE INSTITUTE FOR PUBLIC POLICY

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Submitted to Senator R. Ted Bottiger
by the Washington State Institute for Public Policy

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Summary Report

This is a descriptive study of hazardous materials incident management in Washington State. It is in response to a request from Senate Majority Leader, R. Ted Bottiger. Using his letter as a guide the objectives of this study are:

1. To describe present policies and procedures for the management of hazardous materials incidents;

2. To identify potential gaps and overlaps in present policy; and

3. To identify the major procedural issues which arise because of policy gaps or overlaps.

The term *hazardous materials incident* is used as it is defined in Chapter 70.136 RCW, "Hazardous Materials Incidents:"

Hazardous materials incident means an incident creating a danger to persons, property or the environment as a result of spillage, seepage, fire, explosion or release of hazardous materials, or the possibility thereof.

This definition includes not only the actual release of hazardous materials, but also their *potential* release. It includes not only an obvious spill, but also less-than-obvious seepage or dumping. It requires consideration not only of materials which are hazardous because they are toxic, but also those materials which are flammable, explosive or highly corrosive.

Hazardous materials incident management is complex, in part because of the countless number of hazardous materials in use. Authority and responsibility for public agency involvement derives from a considerable range of state, local and federal legislation which provides for environmental protection, public health and public safety. Since the subject is so complex, the major contribution of this study is to sort out the puzzle of interrelated laws and agency procedures and to produce a clear picture of the present system of hazardous materials incident management.

Spill Response and Emergency Response

Hazardous materials incidents are managed through two sets of public policies and procedures:

- Those which address the management of spilled hazardous materials to protect the environment or public health—*spill management;*

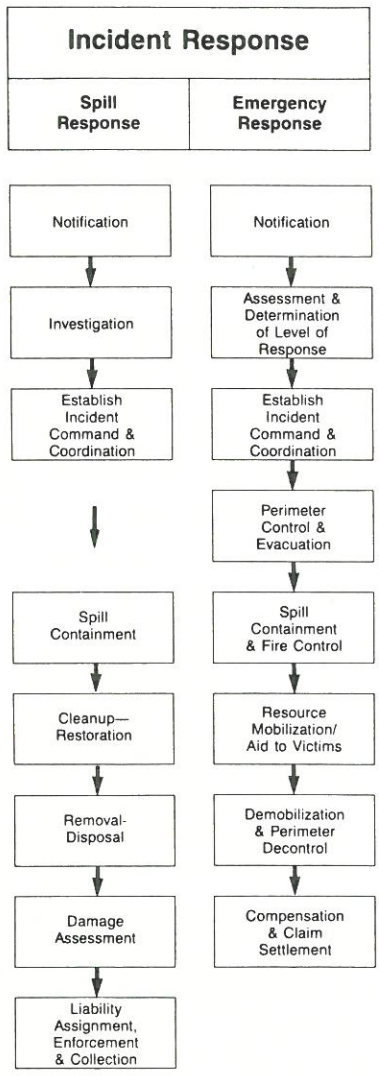
- Those which address the management of the emergency aspects of an incident, such as the evacuation of nearby residents from the danger area—*emergency management.*

This distinction between "spill management" and "emergency management" helps to clarify different agencies' roles in the overall "incident management" system. Figure 1 illustrates the stages of incident response.

Spill Response . The emphasis in Spill Response is on cleaning up the spill. Authority for spill response to hazardous materials incidents is generally tied to regulatory legislation and the agencies involved are generally those which regulate hazardous materials to protect public health and the environment. Public policy generally requires the spiller to pay cleanup costs and, in most cases, the spill response agency has authority to enforce payment. Since the spill may result from a violation of regulations designed to prevent spills, the spill response effort is likely to include an enforcement action.

Emergency Response. The emphasis in Emergency Response is on managing the emergency, which may include the hazardous duty of a fire fighter to protect the public from the immediate threat in a hazardous materials incident. Keeping bystanders out of harm's way and evacuating nearby residents may also be part of the emergency response effort. The authority for emergency response generally derives from broad public safety legislation or from specific legislation providing for emergency or disaster management. Emergency response agencies include fire departments, law enforcement agencies and emergency management agencies.

Figure 1: **Stages of Incident Response**



Overview of Public Agencies Which May Be Involved in Incident Response

Spill Management Agencies. The public agencies most commonly identified with spill response in Washington State include:

- Washington State Department of Ecology
- U. S. Environmental Protection Agency
- Washington State Department of Social and Health Services

Other agencies may also have incident spill response roles. These agencies' roles may be less well known, but are also important. They include:

- Washington State Department of Agriculture
- Washington State Office of the Attorney General
- Washington State Department of Transportation
- Washington State Department of General Administration
- Local boards of health
- Local water systems
- U. S. Nuclear Regulatory Commission
- Washington Utilities and Transportation Commission
- Washington State Patrol

Emergency Management Agencies. The public agencies most commonly identified with emergency response to hazardous materials incidents include:

- Washington State Department of Emergency Management
- Local departments of emergency management
- Washington State Patrol
- County Sheriff's offices and city police departments
- Local fire departments

Additional agencies have less well known emergency response roles.

- Federal Emergency Management Administration
- U. S. Region X Regional Response Team
- Department of Social and Health Services
- Other state agencies

Characteristics of Hazardous Materials Incidents

The particular characteristics of each incident determine which agencies will have management authority and responsibility in that incident. The characteristics are:

1. The hazardous substance spilled (or in imminent danger of being spilled);
2. The size of the spill;
3. The geographic location of the incident;
4. The potential effects of the spill (or threatened spill) on, for example, drinking water supply or public health;
5. The type of site at which the incident occurs (whether in transport, at a chemical facility, etc.).

Policy Gaps and Overlaps: Clarifying the Issues

With a large number of federal, state, and local agencies involved in hazardous materials incident response, it is important to identify where gaps and overlaps in jurisdiction might exist and how these omissions and duplications affect the state's ability to protect its citizens and natural resources. This report identifies policy gaps and overlaps in three distinct areas: within spill response, within emergency response and between spill and emergency response.

Gaps in Spill Response Policy

- Washington Utilities and Transportation Commission has authority to inspect loading areas of common and contract motor carriers, but not the loading areas of private motor carriers. (A private motor carrier is a truck that is owned and operated by the same company that owns the merchandise transported and loads and unloads it.) Thus, WUTC is unable to detect problems that might result from the careless loading and unloading practices of private motor carriers.
- Although WSDA licenses commercial pesticide applicators, the agency's regulations do not permit WSDA to require applicators to pay for clean-up of pesticide spills. WSDA recently dropped as unenforceable its requirement that pesticide dealers post a notice indicating who an applicator should notify in the event of a pesticide spill.

Overlaps in Spill Response Policy

- Both WDOE and DSHS have cleanup authority and damage assessment responsibility for spills of certain pesticides. Both WDOE and WSDA have responsibility for disposal of contaminated material (water, soil) that results from a spill by a WSDA licensed pesticide applicator.
- Both WDOE (or EPA) and the owner or manager of a public resource have the authority and responsibility to conduct a damage assessment of an incident that causes damage to that public resource. The departments of Fisheries, Natural Resources and Parks and Recreation are examples of agencies that duplicate the damage assessment responsibility of WDOE.
- Frequently more than one spill response agency is responsible for investigation of a hazardous material spill. However, this duplication is necessary because each agency involved must conduct its own investigation to comply with its enforcement responsibilities.

Gaps in Emergency Response Policy

- Local responsibility for assessing emergency response requirements particularly for perimeter control and evacuation may not be clear for local jurisdictions that have not prepared emergency response contingency plans.

Figure 2: **Agencies Potentially Involved at Each Stage of Incident Response**

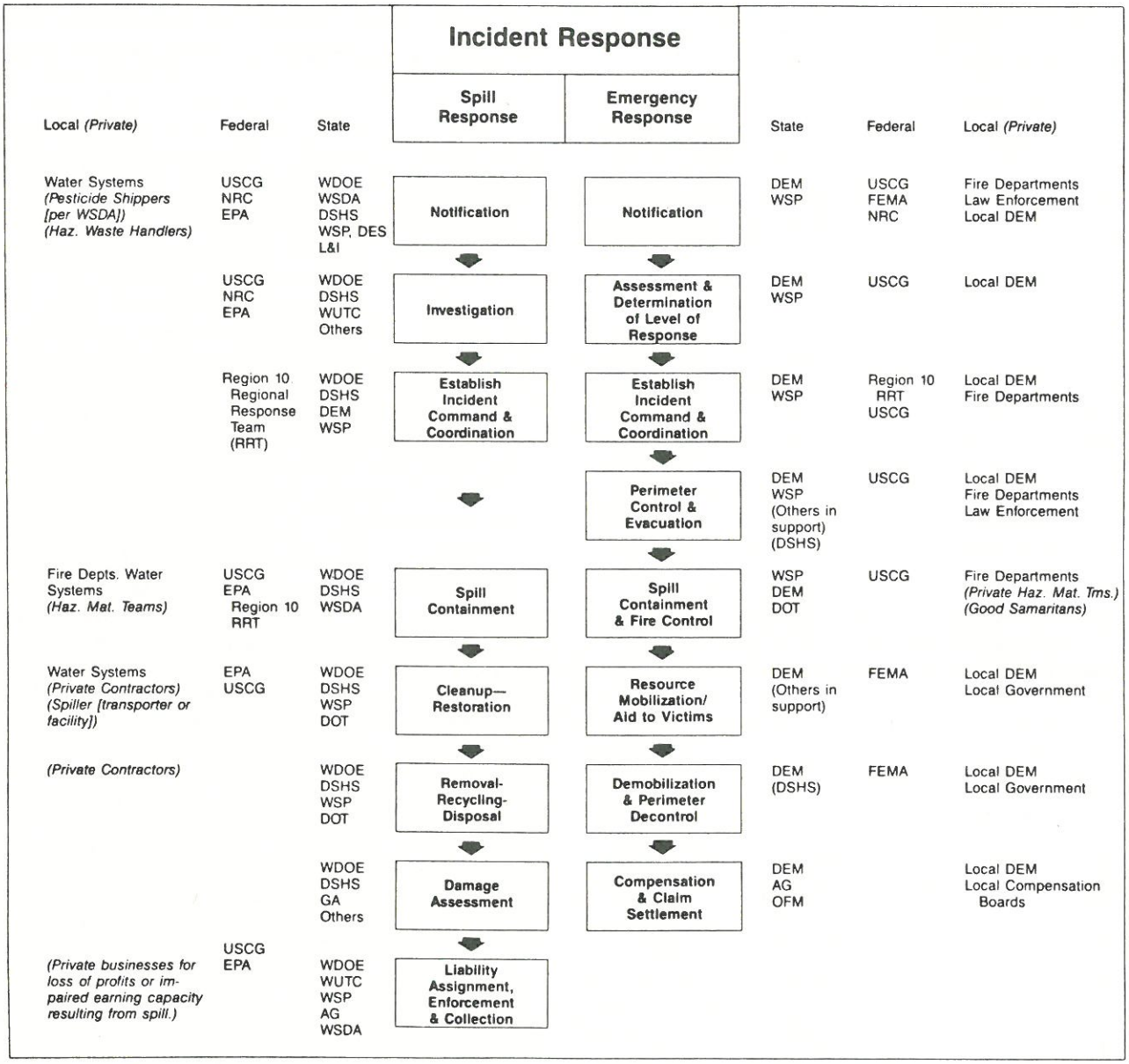


Figure 2 illustrates where each agency could be involved in a hazardous materials incident. Figure 2 also shows that some agencies' involvement is limited to certain stages of the incident response process. For example, WUTC may be involved in spill investigation and enforcement actions, but not in spill cleanup or disposal. DSHS may be involved in all aspects of spill response except enforcement and collection. In addition, Figure 2 illustrates that some agencies may have both spill response and emergency response roles, e.g., local fire departments, the U. S. Coast Guard and the Washington State Patrol.

• Fire service training is provided by the Commission for Vocational Education. The Commission interprets its authority as being limited to serving public agencies, thereby excluding private hazardous materials response teams from receiving training. If this training were available to private response teams, private and public responders could probably work together better.

The Department of Emergency Management has been given the impressive task of coordinating all state and local emergency response activities. Once accomplished, this coordination of activities will eliminate many of the jurisdictional and procedural duplications and omissions. It is a complex task which requires the cooperation of local jurisdictions. Specifically, DEM assists local governments in developing emergency response plans and reviews those plans to assure that the local and state plans are compatible. DEM has requested that each local jurisdiction designate an on-scene incident command agency. By April of 1984 approximately 70 local governments had complied with the request. DEM also has the authority to plan and conduct training programs for the emergency management of hazardous materials incidents.

It is important to remember that when a local jurisdiction has the resources to handle a hazardous materials incident, control of that incident remains with local authorities. Only when the size or scope of the incident outstrips the local government's ability to manage the situation does the state's Department of Emergency Management assume control.

Issues in the Coordination of Spill Response and Emergency Response Policies: Gaps, Overlaps, and Procedural Issues

The notification system for reporting hazardous materials incidents for emergency management purposes is not well-suited for spill response reporting. Spill response agencies need notification of hazardous materials incidents which often are not considered emergencies by reporters. In addition, the kinds of information about an incident required by an emergency response agency is apt to be somewhat different than what is required by a spill response agency.

Although spill containment is within the authority of both spill responders and emergency responders, each group tends to approach the problem differently. The spill responders are generally not expected to jeopardize their own safety to contain a spill. While some hazardous duty is expected of firefighters, their personal safety is still of prime importance. The fire department is apt to be more concerned with controlling the immediate effects of the spill, than with its potential long-term effects on public health or the environment.

Both DEM and the spill response agencies (notably WDOE and DSHS) have prepared contingency plans for responding to hazardous materials incidents. Neither WDOE nor DSHS has yet adopted memoranda of agreement with DEM on its contingency plan. The eventual integration of spill response agency plans with DEM plans will result in a more coordinated response to hazardous material incidents.

Gaps in the Broader Hazardous Materials Incident Management System

The major gaps in the management system of hazardous materials incidents are the absence or near absence of several system elements. Reporting, planning, training and interagency evaluation are the system elements most in need of further development. Figure 3 illustrates the complete management system.

Program Planning and Development can be seen as beginning at the agency level. Within the broad context of agency-wide planning, specific contingency planning is conducted. How well these plans for both emergency response and spill response are integrated with each other at the federal, state and local levels will greatly affect how well incident response will be coordinated. At present, the Governor's Hazardous Materials Advisory Board has a mandate to review and promote integrated contingency planning for spill response and emergency response agencies, as well as the private sector. DEM, which has the mandate to prepare integrated emergency response plans, chairs and staffs this advisory board. WDOE, which has the mandate to coordinate spill response, is represented on this board, as is DSHS.

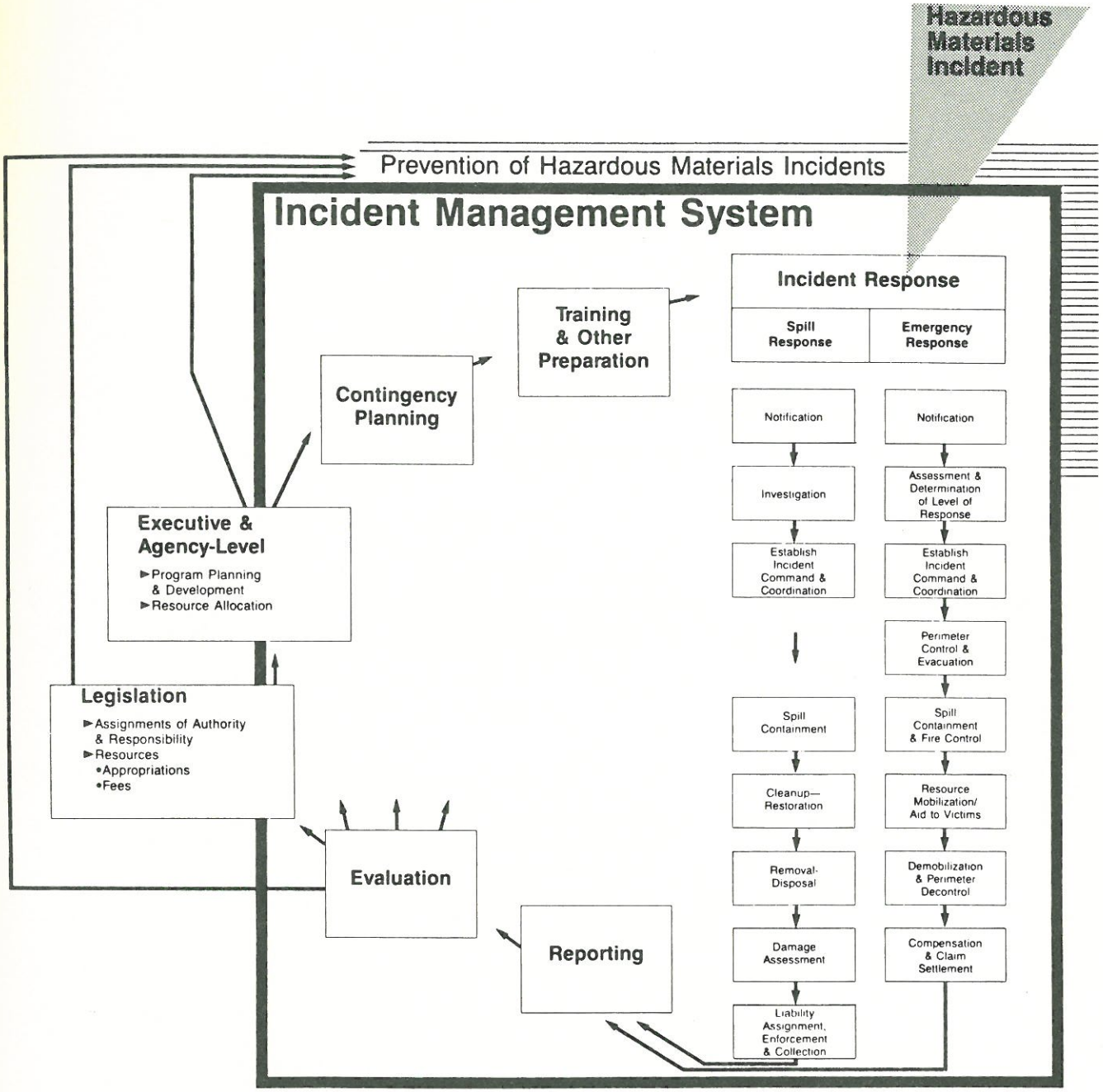
Through *training*, agency representatives can not only gain essential personal safety and incident management skills, but also sensitivity to the roles of other agencies in the incident management system. The Fire Service Training Division of the Commission for Vocational Education is already involved with training for fire departments. The commission appears to have the authority to provide a broader contingency and intergovernmental training role. A new fire service training facility is now open in North Bend. DEM also has emergency management training authority.

Other preparations for incident response include specialized equipment. This ranges from personal safety gear to sampling, measurement and testing equipment.

Reporting the results of incident response activities, as well as planning and training activities, is presently the weakest link in the system. Who is doing what is not well known. Even the contingency plans do not seem to be in wide circulation.

Inter-agency *evaluation* of each part of the system is fairly haphazard. The Governor's Hazardous Materials Advisory Board has begun meeting, but it has not yet produced a report. To date, the Puget Sound Council of Governments has been the most visible contributor to inter-agency incident management evaluation through its large conferences and 1981 *Hazardous Materials Study for the Central Puget Sound Region*. The training recommendations in this P.S.C.O.G. study are still among the best available and are only now beginning to be implemented.

Figure 3: **Hazardous Materials Incident Management System**



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