Chemical wastes have been dumped into America’s environment for over 350 years, dating back to Pilgrim settlements in Massachusetts and the manufacture of saltpeter and alum. By the late 1930s, the chemical industry in the United States was producing over 170 million pounds of synthetic-organic chemicals annually. This figure skyrocketed to an estimated 2 trillion pounds annually by the late 1980s, a direct result of the “chemical revolution” that has transformed America since World War II.¹

While the chemical revolution benefits all of us by creating new products to enhance our living standards, it also has a significant downside. It has created over 80 million pounds of hazardous waste, and alarmingly, if early 1980s estimates of only 10 percent proper disposal are accurate, America faces an enormous silent enemy.²

Brief History
Pollution laws existed at both the State and Federal levels by 1899; however, more than 60 years passed before there were criminal sanctions for illegal disposal of hazardous wastes. In the late 1970s and early 1980s, the Resource
Conservation and Recovery Act and “superfund” legislation finally allowed prosecutors to seek stiff criminal sanctions for the illegal disposal of hazardous wastes. As a result, tremendous progress has been made in the effort to enforce environmental laws. Approximately 614 indictments or informations have been filed, over $31 million in criminal fines have been imposed, and 474 corporations or individuals have been convicted. In addition, these cases have set precedents in the field of environmental law.

Because of the general public’s heightened awareness and concern, environmental crimes are gaining the attention of law enforcement personnel, and many States already have established active environmental crime investigative units. However, in order to investigate these crimes successfully, it is necessary to develop an investigative plan.

**Investigative Plan**

A typical environmental crime investigation may begin with a complaint from a former disgruntled employee, who says that a certain company, in order to avoid the high costs of legal disposal, buried over 300, 55-gallon drums of hazardous waste in the back part of the company’s property. If the allegation is determined to be credible, several critical steps should be taken. Investigators should:

- Identify which hazardous waste is involved
- Identify who is responsible for the illegal waste disposal
- Document the investigation in order to prove criminal intent

Investigators can learn important information about the companies in question by checking a variety of sources. Investigators should familiarize themselves with these sources.

**Sources of Information**

As soon as a case is opened, investigators should learn as much as possible about the suspect company. They should determine both what the company is authorized and not authorized to do. They should also determine what documentation the company is required to maintain so they will know what should be reviewed or inspected when investigators confront the company. And, it is important to anticipate what hazardous materials may be involved by reviewing documents on past operations and violations.

Much of the information investigators need is available from State, local, and regulatory agencies. For example, States maintain lists of authorized hazardous waste generators and transporters, as well as treatment and storage/disposal facilities. Fire departments sometimes have information concerning on-site inspections or unusual occurrences at the company’s facilities. Health departments may have complaints of contamination in nearby areas. In addition, licensing agencies have information about business operations, company officers and owners, and annual reports. And, reports filed with the Securities and Exchange Commission may reveal principal products, legal proceedings, financial data,
directors/officers, and other significant information.

Informants are another good source of information. They may be able to pinpoint specific details about illegal activities, such as when and where these activities occurred, and what efforts were made to conceal the illegal acts.

Once investigators learn as much as possible about the suspect company, they should decide how the investigation should proceed, what investigative techniques should be used, and the legality of those techniques.

The Investigation

There are several effective investigative techniques to use during hazardous waste investigations, including:

- Stationary, moving, and aerial surveillance to document ongoing criminal activity
- Long-range photography and closed-circuit television to document probable cause
- Tracing the origins of drum and barrel markings to manufacturers and purchasers
- Remote monitoring devices to gather evidence
- Consensual monitoring of informants and cooperating witnesses to obtain first-hand incriminating statements
- Grand juries, which may result in unexpected evidence through compelled cooperation

Support Team

Another important step in hazardous waste investigations is to assemble a technical team to assist in the investigation. This team of experts offers technical and legal advice to the case investigators.

As the investigation progresses, it is important to build an investigative support team to ensure proper preparation and execution of a site sampling plan, proper evidence collection and chain of custody, and proper analyses, storage, and disposal of samples. For example, from the onset of the investigation, the prosecutor should be available not only to recognize and interpret legal nuances but also to evaluate the potential for prosecution. Also, as the need arises, investigators should add other specialists to the team, including:

- Technical specialists, such as engineers, chemists, and geologists, who can give guidance on what to sample and how to sample properly
- Equipment operators for digging equipment, barrel handling devices, remote sensing and sampling devices, and a variety of hand-operated equipment necessary for unearthing buried evidence
- Health and safety specialists who can give advice regarding the dangers of possible exposure to hazardous substances and advice on what equipment and methods to use in order to maximize

...it is important for investigators to keep detailed notes on what they see, hear, taste, smell, and feel.
the protection of search personnel

- Regulatory agency personnel to evaluate documentary and physical evidence to determine whether the continued operation of the company would jeopardize the public’s health

- Other investigative personnel to photograph the site, maintain the search logs, identify and interview persons present at the facility, prepare sketches and field notes, and prepare chain-of-custody forms and receipts

In addition, there is a need for security and safety backup personnel. This should include police to assist in crowd control, fire department and emergency medical personnel in the event of an accident or possible explosion or fire during the search, and HAZMAT (hazardous material) personnel to assist in decontamination and confinement, if there is some exposure to hazardous substances.

During the preliminary investigation, investigators should attempt to answer as many questions as possible without intruding on the company’s property. However, in order to obtain answers to all of the questions, company officials must be confronted, and this action may require a search warrant.

Search Warrants

Search warrants allow investigators to go onto private property to investigate further illegal hazardous waste activity and to obtain samples of hazardous waste. However, before a search warrant can be issued, probable cause that a crime has been committed and that evidence exists in the place to be searched must be shown. Investigators should document their case through information they have developed during the investigation, as well as other supporting exhibits, such as maps, photographs, manifests, citizen complaints, and off-site monitoring results.

Of paramount importance when a search is conducted is recognizing that the persons executing the warrant may be exposed to hazardous substances. Therefore, no warrant should be executed until there is a health and safety plan that is understood by all search participants.

Also, no samples of hazardous or potentially hazardous substances should be taken by other than properly trained and environmentally protected personnel.

Prior to serving the warrant, each person on the investigative team should read the search warrant and affidavit. It is important that they understand what is within the scope of the warrant, such as items to search and seize and places to search. The team should be able to locate and secure the necessary evidence in an efficient and effective manner that is safe to both investigative personnel and the surrounding community.

Conclusion

The disposal of hazardous wastes in America is not a new problem. What is relatively new, however, is the public’s heightened awareness of this environmental problem. In the last decade, well-planned, aggressive team approaches to environmental law enforcement have been the key to successful prosecutions for the illegal disposal of hazardous waste. Through experience and proper training, law enforcement officers can detect and investigate environmental crimes successfully. This, in turn, may ultimately serve as a deterrent to those who attempt to shortcut the system at the expense of the public’s health.

Footnotes