

**HOW TO ESTABLISH AND OPERATE AN
ILLEGAL DUMPING
PREVENTION & CLEAN UP
PROGRAM**



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ABBREVIATIONS AND DEFINITIONS

Authors	Reed, Stowe & Yanke, LLC
Bulky items	Furniture, mattresses, etc.
C & D	Construction and demolition debris
COGs	Councils of Governments
DNR	Missouri Department of Natural Resources
DPS	New Mexico Department of Public Safety
FTE	Full-time-equivalent employee
H-GAC	Houston-Galveston Area Council
KAB	Keep America Beautiful
MoDOT	Missouri Department of Transportation
NMDOT	New Mexico Department of Transportation (formerly: New Mexico State Highway and Transportation Department, NMSHTD)
NMED	New Mexico Environment Department
ORSWMD	Ozark Rivers Solid Waste Management District
SCSWMD	South Central Solid Waste Management District
SEEN	Southern Environmental Enforcement Network
S.E.P.	Supplemental Environmental Projects
SOLV	Stop Oregon Litter and Vandalism
S.T.O.P.	Stop Trashing Our Precinct
SWMD	Solid waste management districts
TCEQ	Texas Commission on Environmental Quality (formerly: Texas Natural Resource Conservation Commission, TNRCC)
U.S. EPA	United States Environmental Protection Agency
White goods	Household appliances like refrigerators and washing machines

EXECUTIVE SUMMARY

BACKGROUND

In recent years there has been an increased awareness with regard to illegal dumping and the impact it is having on both rural and urban areas in the State of New Mexico. As a result, local governments across the State of New Mexico, as well as throughout the United States, have begun to take action to combat illegal dumping.¹ The New Mexico Environment Department (NMED), in cooperation with the New Mexico Recycling Coalition (NMRC) and the New Mexico Roadrunner Chapter of the Solid Waste Association of North America (SWANA), recognized the need for environmental enforcement programs to combat illegal dumping within the cities and counties of New Mexico.

In October 2002 the NMRC and SWANA Roadrunner Chapter, along with sponsorship funding from the NMED, hosted the Middle Rio Grande Illegal Dumping Summit in Albuquerque. Following the Middle Rio Grande Summit Bernalillo County and several Albuquerque groups began work to resolve local illegal dumping issues. NMED began work on a statewide effort to address the illegal dumping problem and to coordinate resources. Key to the NMED effort was to obtain permission from the State of Missouri to utilize this manual as the basis of a New Mexico program. The DNR granted permission in January 2003.

Reed, Stowe & Yanke, LLC was retained in July 2000 by the Missouri Department of Natural Resources (DNR) to develop this manual. The purpose of this manual is to provide local governments throughout the State of Missouri, with a tool that can be used in establishing and managing effective environmental enforcement programs.

In developing this manual, the DNR recognizes that, in many cases, local governments are best positioned to address illegal dumping problems. The benefits of local law enforcement include the following:

- Personnel can typically react to criminal acts such as illegal dumping more quickly than state or federal agencies.
- Programs can be proactive in their approach to enforcing illegal dumping crimes.
- Personnel already have relationships with county prosecutors, circuit attorneys and judges.
- Personnel are very familiar with the geographic and environmental characteristics of the area.
- Programs can be tailored to meet the specific needs of the community.

¹ For purposes of this manual “local governments” is defined as cities, counties, water districts, solid waste management districts, etc. that have some type of structured program in place to combat illegal dumping. During the course of the survey (see Appendix C) the authors found that city and county governments were overwhelmingly the “local” governmental bodies responsible for dealing with illegal dumping. However, the authors also found solid waste districts, water districts and non-profit entities that were responsible for combating illegal dumping in their particular region.

- State and federal programs may only be able to react to the most serious types of illegal dumping.

BENEFITS FOR LOCAL GOVERNMENTS THAT USE THE MANUAL

In addition to having a community that is cleaner and safer for all residents, there are additional reasons why a local government will benefit from using this manual to develop an environmental enforcement program. They are as follows:

- The city or county will be able to better understand the magnitude of illegal dumping within its community.² As a result, the local government will become more aware of the time, resources, and money which are currently being expended by the city or county in combating illegal dumping, but which until now have been “hidden” within various departmental budgets (enforcement costs, prosecution costs, cleanup costs, etc.).
- The local government will have a program that provides a structured and organized manner in which to address illegal dumping. This will result in a more coordinated effort among the various city and/or county departments that are involved in the local government’s environmental enforcement program. It will also provide a centralized location where citizens can call and report illegal dumping activities.
- A structured program will allow the local government to monitor the results of its environmental enforcement program to assist in measuring its success. Items that can be monitored would include: number of arrests, number of convictions, number of illegal dumpsites cleaned-up, amount of fines collected, “avoided” cleanup costs as a savings to the city, etc.
- Finally, an environmental enforcement program that is coordinated with the community’s other solid waste programs (solid waste collection services, recycling, yard waste collection, household hazardous waste collection, etc.) will assist in decreasing the amount of illegal dumping within that community.³

MANUAL FORMAT

The manual is structured to provide separate sections for each of the six key elements associated with an effective environmental enforcement program. The elements are identified as follows:

1. Political Buy-In/Planning
2. Management Structure

² The term “city,” “municipality,” “county,” or “local government” will be used interchangeably throughout this manual. However, the authors would emphasize that this manual will prove beneficial to all governmental agencies and non-profit organizations that desire to establish an environmental enforcement program.

³ By educating residents that illegal dumping is wrong, and at the same time educating them as to how to properly dispose of their waste, using the community’s existing solid waste programs, the community will realize a decrease in illegal dumping. The importance of integrating a community’s environmental enforcement program with the community’s other solid waste programs cannot be over-emphasized.

3. Education
4. Enforcement and Prosecution
5. Cleanup
6. Program Administration

Each of these elements will be described in detail in the following pages of this manual. The manual will discuss how to address each of these elements so local governments can develop effective and successful environmental enforcement programs. **To have an effective environmental enforcement program, each of these six elements must be successfully addressed.**

Every local government is different; therefore, the above elements should be addressed in a manner that meets the unique needs of each particular community. For instance, an environmental enforcement program will most likely have a different focus if it is being implemented for a city versus a county, or a rural area versus an urban area. However, the ultimate goal for each community should be the same: coordinating these six elements to stop illegal dumping in the community. The authors emphasize that there is not just “one way” to operate an environmental enforcement program. Based on each local government’s particular situation and needs, different solutions for addressing each of the six elements may be appropriate for different communities. For instance, not all local governments will use the same approach in educating its citizens.

The authors understand that some people reading this manual will already have environmental enforcement programs in place. For those individuals, the authors would encourage them to review the manual to make sure that they are thoroughly addressing each of the six elements listed above. To the extent that modifications to their program are required, the manual may be used to assist in providing insight with regard to the development of potential ideas and solutions.

Finally, the authors would mention that while this manual was developed for the DNR and the local governments within the State of Missouri, the findings and recommendations within this manual are applicable to all local governments in the United States.

COMMENTS CONCERNING THE MANUAL

We are confident that this manual will be of benefit to local governments throughout the State of New Mexico in reducing the amount of waste that is illegally dumped in the state. The authors welcome and encourage any comments or suggestions with regard to the manual. If you have any questions or comments please contact:

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SECTION 1

POLITICAL BUY-IN / PLANNING

POLITICAL BUY-IN

In order to develop an effective environmental enforcement program, it is essential that the local politicians (city council members, county commissioners, etc.) and senior level management (city manager, county judge, etc.) within the local government be 100% committed to the program. It is also important that the citizens and the local government's employees understand that the elected officials and senior management are 100% behind the program. Support for the program, by the elected officials and senior management, must be shown in the following manner:

- Political support and backing must be provided for the local government staff who are implementing the program.
- Sufficient monetary funding must be made available for the program.
- Sufficient personnel must be made available in order to effectively implement and operate the program.
- Adequate equipment must be provided for the program.

Often it is the local government's staff and/or citizens' groups that must convince the elected officials and/or senior level management that there is a need for an environmental enforcement program. Convincing elected officials and senior management that limited resources should be expended to establish a new government program can sometimes be a daunting task. However, there are a number of ways in which staff and/or citizens groups can educate their elected officials and senior level management with regard to the need for an environmental enforcement program. Examples include:

- **Photographs** – Photographs can be taken of some of the illegal dumpsites within the city or county. These photographs should show the types of waste that are being illegally dumped, as well as the magnitude (i.e. size) of the illegal dumpsites. Photographs are a very effective tool for raising an elected official's awareness, and gaining their political support to develop an environmental enforcement program.⁴
- **Maps** – Maps are another tool to use in gaining the necessary political support for an environmental enforcement program. City staff can put a map of the city on poster board and then insert pins at each location of an illegal dumpsite within the city limits. This method has proven especially effective when a number of illegal dumpsites are located near a city council member's or county commissioner's home or office. Often the elected official may not be aware that an illegal dumpsite is nearby.

⁴ Some rural counties have used "fly-overs" with a local law enforcement helicopter to identify and photograph illegal dumpsites. These photographs can then be shown to elected officials to emphasize the need for an environmental enforcement program.

- **Press coverage in other regions** – Press coverage can be a key motivating factor for elected officials. Many elected officials have benefited from positive press coverage, including news articles and television features, regarding local efforts to stop illegal dumping through enforcement programs and clean ups. By recognizing potential political benefits, elected officials may be more inclined to support these types of programs. Specific examples of news articles are included in Appendix E.
- **Other successful programs** – By informing elected officials that successful enforcement programs are in place in other communities in the State and throughout the county, they may be more inclined to develop their own program. Knowing that these types of programs are effective elsewhere can have a positive impact on elected officials who may doubt whether an illegal dumping enforcement program can be effective. Many of the communities with successful programs are highlighted throughout this manual.
- **Tours of illegal dumpsites** – Some local governments in the United States have educated their elected officials, with regard to the severity of illegal dumping, by providing a bus tour for elected officials (including the media) to visit some of the illegal dumpsites located throughout the community. It is not uncommon for the elected officials to be unaware of the illegal dumpsites since they are usually located at the dead-end of city or county roads, located on seldom used roads, or located out of view from the road on either public or private property. A tour of these problem sites can be very effective in capturing the magnitude of the problem that local officials must address.
- **Explanation of health and safety issues** – Often the elected officials and citizens of a community will not realize the health and safety risks associated with illegal dumping. Listed below are some of the risks that elected officials should be made aware of:
 - drinking water quality issues related to non-point source pollution, especially in areas with private wells
 - flooding caused by debris/wastes that clog storm water management systems, drainage ditches and waterways
 - habitat/breeding grounds for disease-carrying vectors (e.g. rodents and insects)
 - direct contact exposure to sharp objects, medical wastes, caustic substances and fire (especially a risk for children playing in the area)
 - indirect exposure to toxic chemicals and possible hazardous wastes
 - inhaling pollutants carried by smoke from dump fires

For a complete list of potential risks and costs associated with illegal dumping, refer to “Hazards and Negatives Associated with Illegal Dumping” in Appendix A.

When elected officials are educated with regard to these health and safety issues, they can become some of the strongest proponents for the establishment of an environmental enforcement program.

- **Explanation of costs** – It is important to explain to the political officials that it is very costly to cleanup illegal dumpsites, not to mention the health and safety threats to the local government’s employees who cleanup these sites. It has been documented in various individual cases that it costs two to three times more to cleanup illegal dumpsites as opposed to the cost of disposing of solid waste properly.⁵
- **Explanation of changes in landfill regulations** – The number of sanitary landfills in the State of New Mexico has steadily declined since 1992, when changes were made to federal regulations. Changes in federal regulations, which are commonly referred to as Subtitle D, have placed more stringent and expensive requirements on landfills. As a result, many landfills, especially small, publicly owned ones in rural areas, have closed over the last several years. Without these landfills, many communities may lack the disposal options they once had. With fewer landfills, there is a greater likelihood that illegal dumping occurrences will increase, which creates more of a need for environmental enforcement programs.
- **Impact on tourism** – According to the New Mexico Department of Tourism, travelers spend about \$3.9 billion per year in the State. Many travelers to New Mexico are drawn by the State’s natural beauty in its many parks, rivers and lakes. To ensure that New Mexico continues to attract these travelers, it is important to keep these pristine areas clean and free of illegal dumping.
- **Serious environmental issue** – According to a recent statewide survey⁶ of residents completed a Missouri Department of Natural Resources’ contractor, respondents said that the two most serious waste disposal problems facing the State are “dumping trash on public lands” and “litter.” Informal surveys throughout New Mexico have found similar results. This survey indicates that illegal dumping is an issue that elected officials should take seriously.

While the buy-in by elected officials and senior management is essential to the development of a successful environmental enforcement program, the success of the program is still not guaranteed once their buy-in is obtained. It is critical that all city and/or county staff involved in dealing with illegal dumping are committed to the program as well. If there is a breakdown at any level, by the employees charged with implementing the program, the success of the program is jeopardized.

For instance, if a city expends the funds to hire an environmental enforcement officer and provides him with the necessary equipment, but the county attorney does not follow through on the prosecution of people charged with illegal dumping, the success of the program is threatened. **For an environmental enforcement program to be effective, it is essential that elected officials commit their support to the program, and that individuals involved in implementing and operating the program diligently follow through on their duties and responsibilities with regard to the program.**

⁵ The City of St. Louis spends more than \$1 million, annually, to cleanup illegal dumpsites.

⁶ The “Missouri Public Opinion Survey on Solid Waste Management,” was prepared for the Missouri Department of Natural Resources by Pragmatic Research Inc., St. Louis, Missouri in May 2000.

PLANNING

Once the necessary “buy-in” has occurred from the elected officials and senior management of the local government, the next step is for the local government to begin planning how it will structure its environmental enforcement program. Listed below are the five key elements that must be addressed during the planning stage:

1. Determine the proper management structure.
2. Determine the process for educating all parties (citizens, police, prosecutors, judges, etc.).
3. Determine how to enforce and pursue criminal and civil legal options.
4. Determine how to cleanup illegal dumpsites.
5. Determine how to best handle on-going program planning and management.

These five elements were mentioned in the Executive Summary (along with the Political Buy-In/Planning element). Each of the remaining five elements will be discussed in its own separate section of the manual. By reviewing each of these elements within this manual, the reader will be able to begin to formulate ideas as to the best manner in which to address these elements as part of a plan for their local government’s environmental enforcement program.

As mentioned earlier, it is important for the city or county to remember that there is no standard “cookie cutter” approach to developing and operating an environmental enforcement program. Just because two neighboring cities may have different approaches to an environmental enforcement program, it does not mean that one city’s approach to operating its program is “right” and the other city’s is “wrong.” Rather, the bottom line is to determine whether both of the programs are efficient and effective in eliminating and discouraging illegal dumping within their community. If the answer is “yes,” then both communities should continue to operate their program in their current format.

An environmental enforcement program that is properly implemented should be coordinated with the community’s existing solid waste services. By implementing an environmental enforcement program, in coordination with the provision of cost-effective alternatives for disposal of solid waste and recyclables, the community will realize a decrease in illegal dumping. It has been documented in numerous studies that much illegal dumping results from individuals who want to “do the right thing,” but do not have access to affordable and convenient solid waste disposal alternatives, or are not aware of how to properly dispose of their solid waste. By educating citizens about why illegal dumping is wrong (it is a crime!) and costs associated with illegal dumping, and then explaining how to properly dispose of solid waste, the community’s illegal dumping problems will begin to decrease.

SYNOPSIS

- Political support is necessary to ensure sufficient personnel, equipment, and monetary funds are made available to the program.

- Elected officials and senior level management may be persuaded to support environmental enforcement programs:
 - through the use of photos, maps, and tours of existing illegal dumpsites in the area.
 - when informed about the health and safety risks associated with illegal dumping.
 - when made aware of cleanup costs, which are 2-3 times more than legal disposal.
- Planning must address five key elements: management structure, education, enforcement and prosecution, cleanup, and program maintenance.
- Effective enforcement programs must be coordinated with existing solid waste services and understood as part of a comprehensive program.

SECTION 2

MANAGEMENT STRUCTURE

One of the key tasks facing local officials once they have decided to establish an environmental enforcement program is the selection of the most effective management structure. This section of the manual will discuss several of the options available to local governments when deciding on the type of management structure to put in place and will provide a description of the key job positions that will need to be created in the newly formed environmental enforcement program. A listing of the various responsibilities associated with each of these key jobs is also provided. This section also describes the responsibilities of several state and federal agencies that have a role in environmental enforcement matters.

MANAGEMENT STRUCTURE

The local government will be provided with a wide range of options to select from when deciding on a type of management structure. During the development of this manual the authors surveyed (via phone and/or in person) the management of approximately 65 different environmental enforcement programs. While there were a wide variety of management structures utilized, the authors were able to identify several that were more widely used.

The authors would also like to emphasize that local governments will need to consider more than “where” the environmental enforcement program is located within the city or county government. In addition, it is critical to maintain effective communications between the various departments within the local government that are involved in the battle against illegal dumping. Most governmental services are typically provided by the resources located within one department (police, sanitation, fire, etc.). However, because multiple departments are typically involved in the establishment of an environmental enforcement program (prosecutors, police, sanitation, public works, etc.), the local government must maintain clear and effective communications between the multiple departments involved in the environmental enforcement program. All must clearly understand the program goals and their role in achieving success.

The prosecutor (city attorney, county attorney, and/or district attorney), enforcement (police, sheriff, and/or constable), cleanup (public works or sanitation department), education, and administration functions must maintain clear lines of communications so each department understands its duties and responsibilities. By providing clear communications the local government will increase its chances of maintaining an effective environmental enforcement program.

To read about actual cities and counties that have already implemented some of the management structures mentioned in this section, please refer to Appendix C.

Listed below are the management structures most frequently encountered. “Management structure”⁷ is defined as the department within the city or county government responsible for overseeing and managing the environmental enforcement program.

Code Enforcement and Compliance Department

There were a number of cities surveyed that had their environmental enforcement program managed/coordinated by individuals within the Code Enforcement and Compliance Department. In Missouri, the City of Hannibal operates its illegal dumping enforcement program out of the City’s Code Enforcement Department. In Hannibal, the Code Enforcement Department refers unresolved cases to the police department to arrest alleged violators. The City of San Antonio, Texas assigned police officers to this department and the City of Chattanooga, Tennessee used code enforcement officers to monitor illegal dumping. A potential drawback to utilizing code enforcement officers is their inability to carry a firearm, as well as to make arrests, or to generally enforce the state criminal law. The advantage is their likelihood to be more familiar with environmental law than other city or council personnel.

Sanitation Department

Another option is to have the environmental enforcement program managed by the sanitation department. In New Mexico, this would most likely be within a municipal government, since the vast majority of solid waste services provided by the public sector are provided by municipal governments. Many New Mexico counties also provide solid waste services through their road departments. In St. Louis, Missouri the Trash Task Force, which is included as a case study in Section 4, is located in the city’s sanitation department. Kansas City, Missouri also operates its environmental enforcement program out of its sanitation department.

For other states, such as Florida, sanitation services are typically provided at the county level. The advantages to having the program managed from within the sanitation department is that it is easier to coordinate the cleanup of illegal dumpsites and other environmental enforcement activities with the sanitation crews which are housed within this department. Potential disadvantages are that unless the sanitation department makes environmental enforcement a priority, this program can potentially receive less attention than other solid waste services, which are perceived as the sanitation department’s primary tasks (solid waste collection, disposal, recycling, etc.). In addition, the program may become perceived as more of a cleanup program than a prevention program.

Public Works Department

Some cities have located the environmental enforcement program within the public works department. The City of Houston, Texas has established their very successful environmental enforcement program within the public works department. Houston has formed a joint environmental enforcement program consisting of code enforcement inspectors, environmental

⁷ In describing management structures, the authors have listed the department within the city or county government that is responsible for managing the environmental enforcement program. While an environmental enforcement program will require the provision of numerous services from various departments within the city or county government (health, law enforcement, prosecution, courts, public works, etc.), there is typically one department which is charged with administering, coordinating and managing the program.

quality specialists, and police officers located within the Neighborhood Protection Division of the Public Works Department. This program is fortunate that a local county prosecutor is dedicated to dealing solely with environmental cases, so the officers are assured that their cases will receive a high priority.

The potential advantages of locating program management within a public works department are similar to those listed for sanitation departments since personnel may already be familiar with local dumping issues and involved in roadway cleanups. However, unless illegal dumping is made a departmental priority, it may be put on the “back burner” as more established programs compete for limited resources.

Health Department

Some city and county governments have elected to have their environmental enforcement program located within the health department. The Springfield/Greene County Health Department, Missouri, which serves both city and county residents, manages the local environmental enforcement program. Health investigators are used to respond to and investigate illegal dumping activities within the community. Health investigators also respond to all citizen requests and complaints.

Potential advantages of this structure are that health department personnel are generally familiar with environmental laws and the importance of identifying and punishing violators. The department may also have an established relationship with local law enforcement to assist in handling potentially dangerous investigations or criminal offenses. A disadvantage is that code enforcement may continue to get priority treatment in the department. In at least one case reviewed for this manual, an environmental enforcement officer working in another department was assigned to assist in code enforcement activities which were seen as a higher priority than his illegal dumping work.

Sheriff's Department

Some county governments have decided that the environmental enforcement programs are most effective when managed in the sheriff's department. Potential advantages of this arrangement are that sheriff's deputies are trained and experienced in investigations and are commissioned peace officers, which relieves the need to seek law enforcement support from other departments. Using law enforcement officers can also lend a certain amount of credibility to the program, and is therefore more likely to have an impact on the offenders and the community. A potential disadvantage is that sheriff's deputies may not be comfortable with the emphasis on public education and communication involved in environmental enforcement duties. However, this disadvantage can be easily avoided by selecting the “right” peace officer to work in environmental enforcement. This individual would enjoy public speaking and be comfortable giving presentations in the community. In Ralls County, Missouri, the Sheriff's Department investigates and pursues illegal dumping cases on an on-going basis. The sheriff and his deputies will either refer cases to the local prosecutor or the DNR regional office, depending on the magnitude of the violation.

County Commissioner's Office

In at least one very successful program, the environmental enforcement management is located in a county precinct. The Commissioner of Harris County, Texas Precinct Three created an

Environmental Enforcement Division within his precinct with officers who are commissioned out of a centrally located constable's precinct. Enforcement officers serve the entire county. Potential advantages of this structure are that personnel are commissioned peace officers and the program budget is controlled and protected by the Commissioner. Potential disadvantages include the strain placed on one precinct's budget for a countywide program and the tendency to serve the parent precinct.

County Prosecutor's Office

Fannin County, Texas has established its environmental enforcement program within the county prosecutor's office. This approach has ensured that in Fannin County the prosecution of environmental crimes will be vigorously pursued by the county prosecutor. However, this management structure still does not guarantee that environmental criminals will be successfully prosecuted. For instance, if the enforcement officer is not vigorously pursuing the apprehension of these criminals, and the judge is not passing down "stiff" sentences, illegal dumping will continue to be a problem in the county.

Solid Waste Management District (or Authority)

Some states have created solid waste districts or authorities, which are responsible for the management of all solid waste collection within that district or authority. In the State of Missouri, the state has been divided into 20 solid waste management districts. Some of these districts have also implemented environmental enforcement programs. For example, the Ozark Rivers Solid Waste Management District conducts several solid waste management functions for the counties it serves. Some of these activities include operating a trash patrol hotline and conducting community cleanups for local governments. The South Central Solid Waste Management District coordinates with local governments to encourage the proper disposal of solid waste in an effort to prevent illegal dumping.

New Mexico has fifteen solid waste management authorities, councils, planning committees or associations. All have been formed to address solid waste issues within clearly defined areas and all involve some form of Joint Powers Agreement. None of these authorities has enforcement powers. Instead, they rely on enforcement from their member local governments.

Four counties in Ohio (Jackson, Gallia, Meigs, and Vinton) formed a solid waste district to combat illegal dumping. Each of the four counties assigned a deputy for 20 hours per week (.5 FTE) to combat illegal dumping.

Solid waste authorities have the advantage of being solely focused on solid waste issues. In addition, their geographic boundaries can be drawn to meet regional illegal dumping needs. However, disadvantages include the fact that authorities may not have the taxing or revenue gathering capability to sufficiently finance illegal dumping prevention along with solid waste programs.

Coordinated Effort by Multiple Governmental Agencies

In other parts of the country, some local governmental agencies have teamed up to develop a comprehensive countywide environmental enforcement program. This will often include coordination between the city and county governments within a particular region. In other cases, multiple counties have teamed their efforts in combating illegal dumping. For instance, four

counties in Texas (Johnson, Hood, Erath, and Somervall) coordinate to battle illegal dumpers regionally. While this program is fairly new and does not have much to report in the way of results, this is one way in which smaller counties with limited resources can develop an environment enforcement program.

Factors to Consider when Deciding on a Management Structure

This listing is not meant to imply that these are the only management structures that may be used in establishing an environmental enforcement program. Rather, these are the programs that reappeared with some regularity during the survey. It is important to emphasize that there is no “right” or “wrong” management structure when it comes to creating an environmental enforcement program. Each government will need to look at local factors when determining what management structure is appropriate for their community.

Some of the factors, which will affect the type of management structure ultimately selected, include the following:

- Type of government body (city, county, solid waste district, water authority, non-profit organization).
- Ability for local government to draft ordinances.
- Decision to use commissioned peace officers vs. code enforcement officers.
- Whether solid waste collection services are provided by the local government versus being contracted out to a private operator.
- Local government’s level of financial commitment to the program.
- Any “politics” involved in establishing the proposed structure.

ROLES OF REGIONAL, STATE AND FEDERAL AGENCIES

While the focus of this manual is on helping local governments to establish and operate environmental enforcement programs, there is still a need to identify the roles of state and federal agencies involved in environmental enforcement matters. The following list details what roles these organizations have with regard to the enforcement of illegal dumping crimes in the State of New Mexico. In many cases, law enforcement personnel from the local, regional, state and federal levels can improve their productivity by coordinating their activities with each other. Appendix F contains specific contact information for these agencies on a statewide and regional basis.

NMED Solid Waste Bureau Compliance Section

The Compliance Section of the Solid Waste Bureau is responsible for routine inspections of solid waste facilities and operations, and for investigations of illegal dumps and unauthorized scrap tire disposal sites. Compliance Section District Inspectors primarily focus their illegal dumping investigations on large sites that have the potential for causing serious environmental damage. After completing their investigations, District Inspectors attempt to gain compliance. If

compliance is not achieved, cases are referred to the Section Manager and NMED Office of General Counsel to be handled administratively. If compliance is not achieved or circumstances warrant, the case is referred to the Attorney General's Office or to local prosecutors for civil and/or criminal prosecution. In some cases, District Inspectors will coordinate directly with local governments to enforce compliance.

NMED Spill Notification

The NMED has a spill notification system that can help local governments report and identify illegally dumped materials. NMED can also help communities review options for disposing of these materials. Spills or unauthorized releases should be reported as soon as possible but no later than 24 hours after discovery.

Report any amount of any material in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or may unreasonably interfere with the public welfare or the use of property. This includes chemical, biohazardous, petroleum-product, and sewage spills or incidents. In addition to recent spills, the discovery of evidence of previous unauthorized discharges, such as contaminated soil or ground water, also must be reported.

NMED Field Offices

A major objective of the Field Operations Division is to facilitate the programs and efforts of other Department programs directed from the central office in Santa Fe. To help achieve this objective, Division operations include administrative support of central office staff in the petroleum storage tank, hazardous waste, air quality, surface water, ground water and solid waste programs. Not all Field Offices have staff in these programs; however each NMED Field office has staff that can assist the public and local governments in contacting the District Inspectors or other Solid Waste Bureau staff for assistance with solid waste management issues, including illegal dumping.

NMEMNRD State Parks Division

Park rangers in the State Parks Division of the New Mexico Energy, Minerals and Natural Resources Department are responsible for enforcing state laws in the 31 state parks and historic sites. Illegal dumping cases are handled individually by each state park. Park rangers will generally develop cases, and process them through Magistrate Court or turn them over to local prosecutors. For the most part, park rangers have been successful in working with local prosecutors because they are able to develop relationships with specific individuals.

NMEMNRD State Forestry Division

Forestry Division establishes partnerships with New Mexico communities, landowners and the federal government to suppress wildfires, manage timber sales, protect ecosystems and endangered species and remediate burned acreage. Forestry Division operates many education programs related to forestry and natural resources that may be of benefit to local communities as they develop their own educational program resources.

New Mexico State Land Office

The Commissioner of Public Lands has jurisdiction over all state lands and is responsible for administering the state's land grant trust, which includes nine million acres of surface land and thirteen million acres of oil, gas and mineral rights. These lands are leased to produce revenues for the trust beneficiaries. The leaseholder is primarily responsible to maintain the land and would normally rely on local jurisdictions for any prosecution or enforcement action resulting from illegal dumping activities.

New Mexico Department of Game and Fish

The New Mexico Department of Game and Fish is responsible for the protection of wildlife and for managing more than 212,000 acres of land in the State of New Mexico. To carry out these responsibilities, the department employs approximately 65 game wardens, who are enforcement personnel with full police powers. As one of their duties, game wardens enforce the state's illegal dumping and litter laws when violations occur on state-owned or managed land. Game wardens typically coordinate with local prosecuting attorneys and district court judges.

New Mexico Attorney General's Office

The Water, Environment and Utilities Division (WEU) is involved in numerous cases to protect New Mexico's environment. Its attorneys pursue water law cases, hazardous waste disposal matters, endangered species litigation, and the protection of natural resources. The division also is involved in other types of civil enforcement matters, including oil spill remediation, mining issues and various air and water quality cases.

In addition to the civil matters it handles, the division also investigates a number of environmental crimes for referral to the Prosecutions Division. The crimes targeted include criminal violations of the Air Quality Control Act, the Water Quality Act, and Solid Waste Act, the Hazardous Waste Act and general criminal statutes. The division looks to expand its criminal investigations while at the same time concentrating on other violations of environmental law and the potential for added civil enforcement.

Department of Public Safety / New Mexico State Police

Officers of the New Mexico State Police patrol New Mexico highways. The primary responsibilities of the New Mexico State Police are to promote safety on New Mexico's roadways and to enforce the traffic laws. Among the related laws enforced by officers are those involving littering and abandoned vehicles. Local sheriff and police departments can contact their local New Mexico State Police office to coordinate specific needs

New Mexico Department of Transportation

The New Mexico Department of Transportation (NMDOT) is responsible for maintaining approximately 10,000 miles of right of way along state, U.S., and Interstate highways within New Mexico. Because of this large task, NMDOT started the Adopt-A-Highway program in the fall of 1987. The program allows the public to become personally involved in improving the environment and helping to keep New Mexico's roadsides beautiful.

The purpose of the Adopt-A-Highway program is to increase public awareness of the environmental needs along New Mexico's highways while at the same time providing positive community support for anti-litter and highway beautification efforts.

The department encourages local governments to contact them about coordinating efforts to maintain rights of way in the State of New Mexico.

New Mexico Department of Tourism / New Mexico Clean and Beautiful

Created through the Litter Control and Beautification Act of 1985, the New Mexico Clean & Beautiful program's mission is to reduce litter to the maximum practical extent and raise overall litter awareness statewide. New Mexico Clean & Beautiful's primary duty is to allocate funds generated by the Litter Control and Beautification Act, derived from a \$.50 motor vehicle registration fee, to communities and Keep New Mexico Beautiful, Inc – a statewide organization which primarily provides communities with beautification grants. This provides funding to communities throughout the state who implement projects that eliminate, control and prevent litter. Funding is also provided to communities who coordinate program(s)/project(s) designed to educate citizens on the effects of littering, enforce litter ordinances, increase public awareness, recycle, beautify, eliminate graffiti and weeds, and promote litter awareness. In addition, involving citizens by enlisting them as volunteers in programs and community-sponsored activities is vital to these programs.

New Mexico Clean & Beautiful is also affiliated with the national program Keep America Beautiful, Inc., a leader in litter, source reduction and solid waste issues.

United States Environmental Protection Agency (U.S. EPA)

The Criminal Investigation Division of the U.S. EPA is responsible for enforcing federal environmental laws. The U.S. EPA deals with cases that cause serious impacts to safety, human health and the environment. Examples of cases the U.S. EPA could have an interest in typically involve the dumping of large quantities of hazardous materials into bodies of water. The U.S. EPA encourages local governments to notify them about cases. After receiving information about potential cases, the U.S. EPA will screen the information and open criminal investigations for the most serious cases.

Department of Defense

The Department of Defense manages over 4.86 million acres of defense related facilities in the State of New Mexico. Much of this land has restricted access by the public, however it is not immune to illegal dumping activities. Enforcement officers at DOD facilities can cite people for illegal dumping violations using both federal and state laws and have the option of either having federal prosecutors pursue cases in federal court or having county prosecutors pursue cases in the state courts. DOD enforcement officers generally have excellent coordination with local law enforcement and prosecution agencies.

U.S. Forest Service

The U.S. Forest Service manages approximately 8.9 million acres of National Forests and Grasslands in the State of New Mexico. Illegal dumping of general household waste and chemicals from illegal drug operations are significant problems in these parks and grasslands.

Enforcement officers in the park system can cite people for illegal dumping violations using both federal and state laws. Convictions for illegal dumping of garbage can generate fines of up to \$5,000 and jail terms of up to six months. Penalties for dumping chemicals can be much more severe.

Enforcement officers have the option of either having federal prosecutors pursue cases in federal court or having county prosecutors pursue cases in state court. Officers within the park system have an interest in coordinating with local law enforcement officers and prosecutors.

U.S. Bureau of Land Management

It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations. There are 22.9 million surface acres of BLM lands in New Mexico – an area larger than the states of Vermont and New Hampshire combined. BLM coordinates with other agencies and landowners to inventory, monitor and evaluate soil, water, and air resources on public lands. Throughout the state, BLM is addressing non-point source pollution as required by the Clean Water Act and New Mexico Environment Department regulations.

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers requires landowners to obtain permits to excavate in, or discharge material into, a water body of the United States. Possible examples that would require a permit include dumping significant volumes of materials such as concrete, asphalt or tires into a creek or wetland area. When the Corps identifies a possible violation, the case can be referred to the U.S. EPA or directly to a federal magistrate. Local governments should contact the Corps about possible permit violations.

JOB DESCRIPTIONS FOR NEW POSITIONS

When creating a management structure, the local government will need to consider the types of new job positions, which must be created. Local governments should look to hire new positions on a full-time basis. However, in creating new positions, local governments may not have enough funding to hire personnel on a full-time basis. In these cases, the local government could consider hiring someone on a part-time basis or sharing an employee with another program area. The positions listed below are designed to encompass the assignments and duties involved with operating an environmental enforcement program. The positions are as follows:

Administrator

Duties will include, but will not be limited, to the following:

- Establish a budget for the environmental enforcement program and ensure continued funding for the program.
- Coordinate the education of the general public, law enforcement officers, prosecutors, and judges.
- Coordinate the environmental enforcement program with existing solid waste programs in the local government's region.

- Develop and update a database which tracks the operational performance of the program (number of calls from citizens, number of arrests, number of convictions, number of illegal dumpsites cleaned up, etc.).
- Coordinate other administrative duties as required.

The administrator may be an environmental enforcement officer who is assigned significant administrative duties.

Environmental Enforcement Officer

Duties will include, but will not be limited to, the following:

- Educate the public with regard to illegal dumping through the following:
 - presentations at schools
 - presentations to civic associations (Lions Club, etc.)
 - presentations to neighborhood associations
 - presentations at county fairs, community events, etc.
- Educate other law enforcement officers with regard to illegal dumping – what to look for, and who to report it to.
- Respond to illegal dumping complaints (those received from citizens as well as other local law enforcement or agency officials).
- Investigate illegal dumping crime scenes (search for clues, obtain evidence, etc.).
- Patrol areas known for illegal dumping activities.
- Testify in court.
- Conduct surveillance of suspected criminal activity.
- Obtain and serve subpoenas.
- Make arrests.
- Interview suspects.
- Remain knowledgeable on all applicable environmental laws in the State of New Mexico.

JOB DESCRIPTIONS FOR EXISTING POSITIONS

In addition to the positions listed above, a number of existing employee positions will need to coordinate their current activities with the additional responsibilities arising from their involvement in the environmental enforcement program. Based on the magnitude of their involvement, the time commitments may be such that the local government will have to hire additional staff. The current positions are as follows:

Prosecutor

This person will be responsible for pursuing legal action against the person who has been identified by the environmental officer to have violated illegal dumping laws. Prosecutors have the option of either seeking criminal prosecution or filing civil law suits. The prosecutor will also be essential in helping to educate the judges as to the existing environmental laws within the State of New Mexico. The importance of having a prosecutor willing to pursue environmental crimes cannot be emphasized enough. If the local government does not have a prosecutor willing to pursue these cases the problem of illegal dumping will never be resolved within the region.

Judge

This person will be responsible for enforcing the criminal and civil environmental laws of the State of New Mexico and ensuring that appropriate fines and jail time are distributed to those guilty of committing illegal dumping crimes.

The importance of educating judges with regard to illegal dumping cannot be underestimated. In recent years a municipal judge in Dallas, Texas dismissed hundreds of dumping-related citations because he said they should have been filed in state court.⁸

Cleanup Crews

These crews will be responsible for cleaning up the illegal dumpsites and posting signs to discourage further illegal dumping. Most likely, these crews are already cleaning up illegal dumpsites within the city or county. However, in addition to cleaning up these sites, they need to begin documenting the number of sites cleaned up monthly, the types of waste at each site, and the estimated cubic yards or weight (actual, if weighed).

CASE STUDIES – THE NEED FOR INTER-AGENCY COORDINATION

City of St. Louis, Missouri – DNR -- U.S. Coast Guard – U.S. EPA

In 1996, the U.S. Coast Guard responded to a telephone call about glittering on the water surface of the Mississippi River in St. Louis, Missouri. DNR's Emergency Response Unit received a call from the U.S. Coast Guard. After arriving at the scene, DNR staff were able to photograph the suspect's license plate when the suspect returned to the location of the crime. This information was provided to the St. Louis Trash Task Force, the city's illegal dumping enforcement unit. An investigation by the Trash Task Force led to the arrest of the suspect. Because of the seriousness of the material being dumped (hazardous waste), the case was referred to the Criminal Investigation Division of the U.S. EPA. This coordinated effort resulted in a conviction and two-year prison term for the dumper.

⁸ Dallas Morning News, Monday August 11, 1997, Appendix E, Article 1.

Camden County, Missouri – DNR – Missouri Attorney General’s Office

After noticing chronic illegal tire dumping problems in Camden County, Missouri, local residents contacted the sheriff’s department. After the sheriff’s department investigated the case, it was referred to the county prosecutor. The county prosecutor was able to secure a conviction against the dumper. In addition to the county pursuing the case criminally, the DNR and the Missouri Attorney General’s Office pursued the case as a civil action to require the dumper to pay for the cost of cleaning up the dumpsite. The Attorney General’s Office was also able to prevent the property owner from selling the property since he had not paid for the cost of the cleanup.

DNR Northeast Regional Office – Ralls County Sheriff’s Department – Ralls County Prosecutor

The DNR Northeast Regional Office, which is located in Macon, has a strong working relationship with the Sheriff’s Department and County Prosecutor in Ralls County. The DNR Regional Office and the Sheriff’s Department coordinate enforcement efforts to ensure that their organizations pursue enforcement actions against violators as effectively and efficiently as possible. In the past several years, the DNR and the Sheriff’s Department have coordinated enforcement efforts on more than 20 cases. Both DNR and the Sheriff’s Department receive full cooperation from the County Prosecutor for cases that cannot be resolved without going to court. For these cases, the County Prosecutor will prosecute cases where alleged violators failed to comply with requirements set forth by the DNR or the Sheriff’s Department.

Greene County – City of Springfield, Missouri

To address illegal dumping problems in their community, Greene County and the City of Springfield, Missouri have developed a coordinated approach. Multiple county and city departments are responsible for reducing illegal dumping problems in the community. Several of the departments involved in these efforts include:

- Greene County Resource Management Department: Addresses county illegal dumping problems. Responsible for enforcing the county’s illegal dumping ordinance.
 - Greene County Highway Department: Addresses illegal dumping problems on county rights-of-way.
 - Springfield/Greene County Health Department: Addresses city illegal dumping problems.
 - Springfield Public Works Department: Provides legal disposal and recycling options to city and county residents and promotes public education issues.
 - Greene County Planning and Zoning Department: Enforces code related ordinances for the county.
 - Greene County Building Code Authority: Ensures that solid waste created from building projects is properly managed.
 - Springfield/Greene County Office of Emergency Management: Ensures hazardous illegal dumping does not pose a threat to human health and safety and the environment.
-

By taking a proactive approach to addressing its illegal dumping problems, Greene County and the City of Springfield are able to reduce incidents of illegal dumping to a level where there is seldom a need for formal enforcement action. Instead, the county and city actively enforce its ordinances to ensure that local residents and businesses comply with existing laws.

SYNOPSIS

- Management structures vary widely: from city to county to interagency and from civilian to law enforcement control.
- Common features include: involvement of peace officers, involvement of other governmental agencies, involvement of the courts, and the need for good communications among all those involved.
- Factors influencing the choice of management structure include: type of governmental entity, available solid waste services and providers, level of budgetary support for the program, and ability to create necessary interagency relationships.
- New job positions created by illegal dumping programs are environmental enforcement officers and program administrators.
- Existing job positions that will be impacted or modified by the program include prosecutors, judges, and cleanup crews.

SECTION 3

EDUCATION

INTRODUCTION

Education is a must for any successful environmental enforcement program. It promotes public awareness about illegal dumping, provides information about legal options for disposal and recycling, and encourages public cooperation in identifying illegal dumpsites and prosecuting illegal dumpers. Education also helps build consensus among local decision-makers and judges about the importance and value of such programs. Without education, even good enforcement efforts may fail to achieve the public and political support necessary to stay funded and operational.

Education needs to begin early and continue for the life of the program. Even before environmental enforcement officers are hired it will be necessary to educate key decision-makers about the need to do so. The information and materials gathered for such presentations can be used again to announce the program to the public in the form of press releases or handouts. As the program matures, its daily activities should be used as public education opportunities—hiring the first (or second, or third) environmental enforcement officer, receiving grant funds, giving presentations at local schools or civic organizations, conducting a community cleanup day, or successfully prosecuting a case.

A common misconception is that public education has an endpoint. In fact, education should never stop. It functions to tell new residents, new community leaders, and successive classes of school children about the program while reinforcing the message for those who are already familiar with it. Although it is best to begin an education program early and to make use of it often, it is never too late to start.

The value of public education is well known to those who are most familiar with environmental enforcement issues. Numerous state and local governments have identified increasing public awareness as one of the primary approaches needed to solve illegal dumping problems. When Keep America Beautiful convened a nationwide anti-dumping discussion group in 1993, the participants concluded that “the main causes of dumping were lack of convenient legal alternatives, lack of public awareness of the issue, lack of judicial understanding of environmental laws and, consequently, low fines.”⁹

What follows is a general guide to developing a public education plan which will support an environmental enforcement program. Local needs and circumstances will affect the scale and scope of the education plan, however, all general topics below should be considered.

BUDGET

Adequate funding for education is often overlooked in environmental enforcement budgets. While officers and equipment demand the majority of the budget, some funds should be allocated specifically for education. As a rule of thumb, the public education budget can be pegged at five

⁹ *A Public Communication Plan for Decreasing the Municipal Cost to Battle Short Dumping in Philadelphia*, 1995, by Mark Vigiano, executive director, PhilaPride, a Keep America Beautiful affiliate.

to ten percent of the overall enforcement budget. The higher end might include start-up years, production of slide shows or videos, initial design and development of printed materials. For example, the 1997 Anti-Dumping Project budget for Franklin County, Ohio totaled \$382,476, of which \$37,500 was for public education. Items included in the Franklin County education budget were the Nail-a-Dumper hotline, public awareness materials such as bus cards and posters, and workshops for enforcement personnel. In general, the early years of the enforcement program need a larger educational budget than later years, but every year needs some funding for education.

A sample education budget is included in Appendix A. It was developed by the authors for an environmental enforcement program with one enforcement officer and may be considered a “base case” (or minimum) budget.

Funding for education is available through grants from solid waste management districts. These grants from local solid waste management districts may be available for both enforcement activities and public education. In addition, non-profit organizations working in cooperation with local governments may be eligible to receive grants for education from private industry or public utilities.¹⁰ Local government can research local or regional foundations that may have an interest in funding environmental projects. Funding may also be available from other sources such as the U.S. EPA, which typically provides grants through several programs.

PERSONNEL

Environmental enforcement officers are the program’s chief educational personnel. Officers should plan to spend time in the community making presentations to adults and school children as well as to local officials and fellow officers. Community outreach by enforcement officers will continue to be important throughout the life of the program. For this reason, it is highly advisable to consider communications and interpersonal skills when selecting environmental enforcement personnel.¹¹

The percentage of time allocated by officers to education will vary with the age and size of the program. In general, the early stages of the program require the most educational support. At first, enforcement officers may spend as much time in the community talking about illegal dumping as they do in the field investigating it.¹² Educational activities account for 20-25% of the overall man-hours in established programs and as much as 50% in newer ones.¹³

As more officers are added to the program, educational duties can be shared. Division of educational responsibilities should acknowledge individual skills. For example, some officers are more comfortable giving public presentations or working with children than others.

¹⁰ For example, Philapride, Philadelphia’s Keep America Beautiful affiliate, is responsible for public education programs to prevent illegal dumping locally. It receives grant support from utility companies that have traditionally been the victims of dumping in their easements.

¹¹ Some type of presentation skills course for the enforcement officers could be very beneficial and should be considered when establishing the education budget.

¹² It is estimated that during the first year of Harris County Precinct Three’s Environmental Enforcement Division, officers spent 50% of their time on community outreach and public education.

¹³ Based on information from Harris County Precinct Three’s program. (An environmental enforcement program that has been very successful.)

Among the community outreach and public education tasks to be performed are:

- Writing and distributing press releases.
- Taking publicity photographs.
- Coordinating the production of printed materials (posters, brochures, fliers, etc.).
- Establishing and responding to calls from the public hotline.
- Responding to non-hotline public calls.
- Scheduling and delivering public presentations.
- Producing support materials for presentations.
- Coordinating and promoting cleanup days.

Tasks not performed by environmental enforcement officers should be assigned whenever possible to personnel with the appropriate skills or be contracted out to professionals or experienced students. For example, press releases and photographs can be assigned to the city or county's public information staff or those already working with the local media. Alternatively, local college students majoring in journalism or communications can provide public education services at reasonable rates. Often high school journalism classes or yearbook staffs also have talented students who can be contacted through their faculty advisors.

Local non-profit organizations can be a source of individuals with experience at managing special events like cleanup days. Many cities have established relationships or contracts with non-profit environmental groups to help with public education of their recycling, anti-littering, or illegal dumping programs.¹⁴

AUDIENCES

Designing and implementing an effective community outreach and public education program for illegal dumping prevention is like conducting a marketing campaign to introduce and promote a consumer product or service.¹⁵ The first thing to do is to identify the audience. Then, a message can be tailored to fit that audience.

For example, an electric car might be marketed to drivers as the perfect commuter vehicle, to investors as the wave of the future, to environmentalists as the next step in non-polluting transportation. In the end, it's the same car, just different audiences.

¹⁴ Examples in the St. Louis area include the City of St. Louis and Operation Brightside, which provides recycling and environmental education services. Other examples from communities interviewed for this manual include, Philadelphia and Philapride (a Keep America Beautiful affiliate) and the Oregon Department of Environmental Quality and the volunteer action group Oregon SOLV (Stop Oregon Litter and Vandalism), both of which provide support for illegal dumping programs.

¹⁵ *Illegal Dumping Prevention Guidebook*, U.S. EPA Region 5, March 1998, p.21.

Audiences targeted for environmental education messages should include:

- elected officials and staff
- law enforcement officers
- code enforcement officers and health department inspectors
- prosecutors and judges
- general public
- environmentally conscious groups
- local media
- illegal dumpers
- local businesses

Time and consideration should be given to each audience and their particular needs or interests. For example:

- **Elected officials and staff** are sensitive to how much taxpayer money is spent to cleanup illegal dumping, how unattractive it makes the community, and are concerned with possible liability from failing to enforce applicable criminal laws. Elected officials are often responsive to the negative impact illegal dumping can have on tourism.
- **Law enforcement officers** respond to the fact that illegal dumping is a crime and is often committed by those with criminal records.¹⁶
- **Code enforcement and health department personnel** are often asked to cooperate in illegal dumping prevention efforts and should be approached as partners. They are often very familiar with the health and safety regulations of the state.
- **Prosecutors** may be willing to prosecute but may be unfamiliar with environmental law and may need copies of legal pleadings. These can be obtained from the Attorney General Office, Water, Environment and Utilities Division.
- **Judges** may need to be educated about the seriousness of environmental crimes and the importance of jail time and/or fines to deter violators. In Philadelphia, Pennsylvania, judges were sent copies of the city's economic impact study which highlighted the fact that without prosecution and stiff fines, "dumping becomes a game" and dumpers view small fines as simply the cost of doing business while the taxpayers pick up the tab for cleaning up the mess, according to the executive director of PhilaPride.

¹⁶ Review of illegal dumping cases by the City of Houston's Rat on a Rat program indicate that illegal dumpers often have criminal records involving other serious offenses.

- Members of the **general public** respond to clear, direct messages that make them aware of the problem and enlist their support in identifying illegal dumpers.
- **Environmentally conscious groups** will typically be very vocal supporters for the environmental enforcement program and can be used to assist in educating the general public.
- **Local media** need handy reference materials and general background information which includes contact names and phone numbers and dates of upcoming events.
- **Illegal dumpers** are by now almost always aware that their actions are unlawful, so messages should reinforce the fact that illegal dumping is a crime. Often illegal dumping is an economic choice, however, and violators must be convinced that prosecution is likely and that fines will be greater than the benefits associated with illegally dumping.
- **Local businesses** will support anti-dumping enforcement that prevents criminal competitors from illegally cutting their garbage disposal costs.

Other audiences not listed above might include the local business or religious leadership and other community decision-makers. The more key people who can be won over to the merits of the environmental enforcement effort, the better. Every program encounters challenges, but the more friends it has, the more likely the program is to overcome them. The opposite is also true. If key support is not in place, the program may not survive its challenges.

MESSAGES

Once the audiences have been identified, the next step is to choose a “clear and simple message to which the target audience can relate.”¹⁷ Consider the particular needs and interests of each target audience. Involving members of the target audience in the development of educational materials can help ensure that the message is effective. Ways to include members of the target audience might include informal meetings with representatives of the target group. Meetings can be structured like focus groups in which audience members are asked for their opinions about planned educational efforts. Or, they can be asked to respond to questions, such as what they know about illegal dumping, why they think it is important or unimportant, and what arguments or methods they think might work best to reach their colleagues.

The following are some suggested messages for the audiences identified above:

Since local officials are concerned about tax dollars, letting them know how much money is being spent to cleanup illegal dump sites may help persuade them to allocate funds for prevention. Such an approach has been used in Chicago, Philadelphia, and Houston among others.¹⁸ For example, Houston’s Rat on a Rat brochure reads:

¹⁷ *Illegal Dumping Prevention Guidebook*, U.S. EPA Region 5, March 1998, p. 21.

¹⁸ Chicago estimates that cleaning up illegal dumping costs the city about \$11.5 million per year. An economic impact study in Philadelphia in 1995 concluded that direct costs associated with illegal dumping were more than \$5 million annually and indirect costs added millions more.

“Nearly \$5 million of your city tax dollars are spent to cleanup illegal dumping each year. And we’re not talking about your average litterbug. About 160,514 cubic yards of trash are hauled away annually. That’s enough trash to fill 96 football fields, lying side by side.”

Illegal dumping is not just expensive; it’s ugly. In Chicago, which also spends millions each year on illegal dumping, officials recognize that dumping “negatively impacts the community, taxpayers and legitimate businesses” who not only pay for the cleanup but are also victimized by the “unhealthy and unattractive neighborhoods” dumping creates.¹⁹ So, an appropriate message for government officials might be **“Illegal dumping costs you”** or **“Keep our city/county clean.”**

Law enforcement officers, prosecutors, and judges are all concerned with preventing and punishing illegal activity. An appropriate message for them might emphasize the criminality of illegal dumping and the necessity to punish the culprits. For example, **“Illegal dumping is a crime”** or **“Let criminals clean up their own mess”** or **“Environmental crime hurts everybody.”**

Code enforcement officers and health department investigators are generally more familiar with the extent and severity of illegal dumping than other audiences. They can be invaluable allies in the environmental enforcement program. Messages that emphasize cooperation or the similarity of goals are appropriate. For example, **“Let’s work together to stop illegal dumping”**²⁰ or **“We’re united against environmental crime”** or **“Illegal dumping is a threat to public health and safety.”**²¹

Messages to the general public should be kept simple and direct. Examples of effective messages used by successful programs are:

- Keep Kansas City Beautiful²²
- Stop Trashing Our Precinct (S.T.O.P.)²³
- Illegal dumping is a crime²⁴
- STOP illegal dumping²⁵

¹⁹ City of Chicago, Department of Environment Illegal Dumping Program.

²⁰ Used in TNRCC brochure, which can be imprinted for local use. Sample included in this manual.

²¹ Used in Cameron County, Texas public information brochures.

²² Keep America Beautiful (KAB) has a long-standing involvement in local efforts to reduce litter and improve waste handling practices. Keep Kansas City Beautiful is a local affiliate. Information about KAB’s programs and sample educational materials are available online at www.kab.org.

²³ Harris County Precinct Three.

²⁴ Palm Beach County Florida uses this message on posters, brochures, and huge placards posted on the sides of their transfer trailer rigs. North Central Texas Council of Government also uses this message with a raccoon’s bandit mask and the longer message “Stop Illegal Dumping in Its Tracks”. Sample included in this manual.

²⁵ City of Chicago.

- Stop Oregon Litter and Vandalism (SOLV)²⁶
- Only YOU can stop illegal dumping²⁷
- Stop Dumping. It's a Crime!²⁸

It is also important to provide the general public with information about legal disposal and recycling options that are available to them. By providing the general public with this information, it should help reduce illegal dumping. As an example of this approach, Jefferson County has developed and distributes a list of locations to take items like appliances, tires, yard waste and other recyclable materials. A copy of this brochure is included in Appendix A

Local media are interested in a good story with a local angle. Contacts with the media should emphasize why preventing illegal dumping is important for the city/county involved. Economic impact data based on local budgets, photos of local dumpsites, and statements from key supporters among local officials or decision makers are good supporting material. Messages for local media might be: **“Illegal dumping is a problem in our community”** or **“We’re cleaning up our community.”**

Illegal dumpers are reached indirectly through messages aimed at the general public, but can be further targeted via businesses, which may unwittingly provide services to illegal dumpers. These include building contractors, truck rental agencies, lumberyards, and automotive shops.²⁹ Presentations to trade organizations accompanied with information about the anti-dumping laws and associated punishments and fines are also good preventive education. The City of Houston’s Neighborhood Environmental Education Training (NEET) program hosts a well-attended evening seminar for the trade association of the automotive recycling industry.³⁰ Messages to dumpers usually emphasize enforcement and punishment: **“Illegal dumping is a crime”** or **“Dumpers are aggressively prosecuted.”**³¹

In conclusion, different messages are used for different audiences but the program’s most familiar, overarching messages will be those targeted at the general public. Public messages should be included on all educational materials. Other messages may be used for presentations or for targeted mailings to special audiences whose support is being sought. However, since all audiences are also members of the general public they will benefit from any public education efforts as well. Most messages listed above are compatible and can be used in combination.

²⁶ Program name of the non-profit conservation organization that sponsors statewide cleanups and neighborhood enhancement projects in Oregon. Like S.T.O.P., the acronym SOLV is both relevant and memorable.

²⁷ This Snohomish County, Washington message is included on all materials including public utility inserts.

²⁸ Used by PhilaPride and printed inside an octagon to resemble a stop sign.

²⁹ Palm Beach County Florida prints posters that warn against illegal dumping and posts them in county permitting and building offices, and local vehicle rental agencies and tire dealerships. The county also prints fact sheets about illegal dumping targeted at builders and contractors.

³⁰ The event is promoted as an information session on how to avoid getting on the wrong side of the environmental laws and includes presentations by city, county and state officials.

³¹ City of Chicago enforcement brochure, which is included in Appendix A.

In general, messages to the general public should address three basic facts:

- What illegal dumping is and how it is punished.
- What legal disposal and recycling opportunities exist locally.
- How to report incidents of illegal dumping.

Every target audience should be made familiar with the overall program goals and background information on illegal dumping. Basic background might include: *what* illegal dumping is, *why* it should be prevented, *how* prevalent it is locally, *what* are the costs associated with it, *what* are the laws and penalties involved, and *how* the audience can help. All audiences should also be informed about legal disposal options and recycling opportunities in the area. Effective educational brochures include all of this information in an abbreviated form.

METHODS

As many methods as possible should be used to promote the environmental enforcement program. Using a wide variety of methods increases the likelihood that a wide audience will hear the message. Successful programs combine the use of print and electronic media, educational materials, and personal contacts. More than one method is usually employed at the same time. For example, an enforcement officer may give a presentation to a neighborhood watch group, distribute an informational brochure at the gathering, and arrange for photos of the presentation to be sent to the local newspapers. Following are ways to use the various methods.

Print and Electronic Media

Print and electronic media contacts should receive news releases and photographs, which alert them to environmental enforcement activities. Visiting with local editors, reporters, and station managers can help build understanding and support for the program. Include community newsletters, local magazines, and high school newspapers on the list of media contacts.

Although newspapers are more likely to cover local issues than radio or television stations, radio talk shows and local cable stations are good targets for media coverage. Chattanooga, Tennessee has had very good response from radio talk shows in getting out the word about illegal dumping.

In addition, provide a list of the program's key contact people with titles, phone numbers, and e-mail, if applicable. Photos are also welcome and should be as active as possible. For example, include an enforcement officer examining materials from an illegal dumpsite instead of a shot of the dumpsite alone.

Include a fact sheet on the locations, times of operations, materials accepted, and costs associated with legal disposal facilities, citizen drop-off centers, collection stations, and recycling sites.

Invite media contacts to participate in "ride alongs." Members of the press as well as local officials and other community leaders should be encouraged to spend the day with an environmental enforcement officer as he or she investigates complaints. Of course, dangerous situations should be avoided.

News releases are best written by appropriate public information staff members or may be contracted out as described in the Personnel section above. It is advisable to plan for many news releases each year and more in the formative year to build public awareness about the program. Meet with the public information staff and discuss possible story ideas for the upcoming year. Develop a calendar of events that warrant media attention. As cited earlier, these may include: hiring an environmental enforcement officer, receiving grant funds, or cleaning up a dumpsite. News releases should also feature recycling and legal disposal options. For example, a photo of a family recycling together or a story about the how many pounds of scrap metal or newspaper are salvaged from the citizen drop-off center.

Educational Materials

Educational materials most commonly associated with successful programs include:

- Brochures
- Fliers
- Posters
- Bus cards
- Bumper stickers
- Street signs
- Utility bill inserts
- Business cards
- Refrigerator magnets, pencils, rulers, T-shirts, etc.

There are costs associated with the production of educational materials and decisions must be made about how to spend limited education funds. When choosing among the available options, ask where will it be used, who is likely to see it, how many people might it reach, can it be used with more than one audience, how long will it last, how difficult is it to distribute?

Brochures are perhaps the most common educational tool of any program because they are the most adaptable to different audiences and situations. Several samples are included in Appendix A of this manual. In general, brochures should be attractive and informative. Photographs or line drawings are commonly used to provide visual appeal. Desktop publishing programs make designing brochures and other print material relatively inexpensive; however, professional artists or photographers are recommended to provide the kind of high quality images the public has come to expect.

Fliers are less expensive to produce than brochures and may be the first educational piece developed in the educational program. Fliers can be reproduced on a copy machine rather than printed. However, they are usually less attractive and do not last as long since they are more easily torn and wrinkled. They are perhaps best suited to one-time uses such as special events. Fliers may also be considered a transitional general information piece for use until a brochure is produced.

Posters, bus cards, bumper stickers, and street signs create high visibility for the program because they are displayed in public areas for extended periods of time. All benefit from bold designs with short, clear messages. Posters can be displayed in city or county offices, including libraries,

and in local businesses, including those where illegal dumpers are likely to see them.³² Bus cards are displayed inside (and sometimes outside) city buses or light rail.³³ In Palm Beach County, Florida, trailers used to haul waste from the local transfer station are outfitted with placards or posters that announce “Illegal dumping is a crime” in large, easy-to-read letters. Another successful program issues bumper stickers to all waste haulers in the county.³⁴ Similarly, fleet vehicles might be issued bumper stickers or placards. Many cities and counties post “No Dumping” signs along roadways. These signs can also be used to advertise the environmental enforcement message. For example in Florida, 500 highway signs were installed on state and local roadways that read:

Help Keep Palm Beach County Beautiful
ILLEGAL DUMPING
IS
UNLAWFUL
Up to \$5,000 fine & 5 years in Prison

Utility bill inserts provide a way to reach all area residents through direct mail. There is often an expense involved for inserting the material into the bill envelopes. However, if the utility company is producing its own insert, it may be willing to simply include information about the environmental enforcement program at no charge. Utility companies are often sensitive to illegal dumping issues and may be willing to cooperate on other educational efforts or provide funds for prevention messages since their easements are often the target of such dumping.³⁵

Promotional materials may be produced as gifts for public presentations or at community special events. The items are imprinted with the program message and may also be used to commemorate community cleanup events. Common items include pencils, rulers, magnets, coasters, drink coozies and t-shirts.

Personal Contacts

Personal contacts are perhaps the most effective ways to promote environmental enforcement education. These include presentations to both children and adults at venues such as:

- Schools
- Scout meetings
- Public library programs ³⁶
- Junior and senior high school service clubs (Interact, Key Club, 4-H, etc.)
- Environmental organizations (adult and student)
- Community and civic associations

³² Palm Beach County Florida distributes posters to code enforcement, permitting and building offices as well as truck rental agencies and tire dealerships.

³³ Franklin County Ohio uses bus cards successfully in cooperation with the City of Columbus Transit Authority.

³⁴ Franklin County, Ohio.

³⁵ PhilaPride in Philadelphia and Oregon SOLV are both non-profits that receive support from utility companies to combat illegal dumping.

³⁶ Harris County Precinct Three environmental enforcement officers have successfully used Houston Public Library’s summer reading days to address school children. Many communities have special library programs that can be a venue for environmental enforcement education.

- Adult service organizations (Lions, Kiwanis, Rotary, etc.)
- Senior centers
- Chambers of Commerce
- Community special events days
- Neighborhood watch meetings

Presentations to children have been a mainstay of many environmental education programs. Children are open to new ideas and often eager to act constructively to improve their neighborhoods. Children can also help build family support for programs. Recycling programs around the country have benefited from children's commitment to their goals.

When addressing children, it is important to keep the presentations relatively short, to keep the language direct and free of jargon, and to involve them in an activity, such as asking questions or singing a song. Like recycling, illegal dumping can be presented as part of the larger issues about proper handling of waste materials.

Lesson plans and children's activities that address waste issues are available from Keep America Beautiful (KAB) and the EPA. In addition, KAB has curricula for use by teachers, which supports the overall goals of environmental enforcement programs. *Waste in Place* for grades K through 6 "introduces students to litter and integrated solid waste management" and *Waste: A Hidden Resource* for grades 7 through 12, provides "an overview of solid waste and hazardous waste." Local school district administrators should be encouraged to approve the curricula for use in their schools and to send teachers to training sessions.

Visual aids and creative use of props can help capture and hold children's attention. For example, the environmental enforcement officer in Pearland, Texas designed a "recycled robot" called Mrs. D using a remote control car as the base, some plastic garbage cans for a body, a coffee can for a head, and a mop for hair. She has proved to be a hit with elementary school children. Music can also make presentations more interesting.

Fliers and brochures developed for adults can be distributed to children for them to take home. Or, a special children's brochure can be developed that is aimed at younger audiences.

Presentations to adults should also include distribution of informational brochures. Similarly, audio-visual materials are recommended for adult audiences. Slides or overhead projections or power point computer presentations are examples. A short slide show might include images of environmental officers on the job, dumpsites, a court scene, and recycling or citizen collection stations. Music can be added to the slide show to enhance its appeal. A tabletop display might be created using the same slide images or photographs. It could be displayed while a presentation was being conducted or used as a table prop at a community event. Slide shows, like videos; can be set up in a continuous loop to attract visitors to the table where an environmental enforcement officer can discuss the program one-on-one.

Some programs have produced videos.³⁷ Videos can be expensive undertakings and it is preferable to seek assistance from those with experience and expertise. Local cable stations may be able to assist, or experienced students from college communications or radio and television departments. Alternatively, still photographs can be used to create a short video with musical

³⁷ Newton County, Missouri and Franklin County, Ohio.

accompaniment for much less money. Considering the expense involved, a good slide show is probably the best audio-visual option for most programs

When scheduling public presentations, it is preferable to contact groups with regularly scheduled meetings or to participate in planned events rather than to hold a special meeting or create a special event. Service organizations, schools, civic associations, scout groups, etc., usually welcome outside speakers and can guarantee an audience turnout. Local newspapers often carry calendar sections, which list meeting times and contact phone numbers for community groups. A systematic effort should be made to call groups and to schedule presentations to both adult and child-based audiences.

COMMUNITY ACTION

Community action involves the public directly in the environmental enforcement program. While many of the public appearances listed above might be considered community outreach efforts, their focus is primarily educational. For the purposes of this manual, the author highlights two activities that require the public to do something: use a hotline to report illegal dumping and to participate in community cleanups. Both increase public awareness and understanding of the program through direct action.

Hotlines or tiplines are one of the most important parts of any environmental enforcement program. When program managers were queried for this manual, many said it was central to their program's success. In one case, the entire public education program is built around it.³⁸ Hotlines enlist the public as partners in the fight against illegal dumping. Their effectiveness depends on the public's understanding what it is and how to use it. Promotional messages must be particularly memorable. Examples of effective messages are:

- Trash Patrol³⁹
- Nail a Dumper⁴⁰
- Rat on a Rat⁴¹
- See This /Do This (Image of illegal dumping/Image of a telephone)⁴²

Along with the message, the phone number is also important. Some programs choose numbers that spell out words, such as Ozark Rivers Solid Waste District, Missouri Trash Patrol, which uses (800) NO2-DUMP. Whatever the phone number is, it should be prominently displayed on all educational materials. On longer print pieces, like multi-fold brochures, it may be shown in more than one place. Franklin County Ohio's Nail-a-Dumper hotline appears on the cover, inside and back of their brochure.

Hotlines may be dedicated phone lines or may simply be the phone number of the environmental enforcement office with an answering machine or other answering service for after hours calls. In more sophisticated systems, the line can be set up to automatically page officers when calls come in.

³⁸ Franklin County, Ohio.

³⁹ Ozark Rivers Solid Waste District, Missouri

⁴⁰ Franklin County, Ohio.

⁴¹ City of Houston, Texas.

⁴² City of Chicago, Illinois.

To get the greatest benefit from the hotline, clear, simple instructions should be provided to the public about what type of information is most helpful. This information can also be included on the program's educational brochure. The City of Chicago includes profiles of truck bodies on their brochures to assist the public in identifying the kind of vehicle used in the illegal dumping activity. Before setting up a hotline, call other programs and listen to their messages. Then develop a message that suits local needs.

The Ozark Rivers Solid Waste District mans a trash patrol hotline. After receiving anonymous complaints from citizens, reports are forwarded to the appropriate county official.

Hotlines are often modeled on crime stopper programs which give rewards for successful prosecution of reported activities. St. Louis, Missouri has offered \$100 rewards for tips that lead to the conviction of illegal dumpers. Such awards encourage public reporting of illegal dumping and public willingness to give testimony to help convict dumpers.

In the future, St. Louis may not pay as many rewards as they have in the past because the city expects that people convicted of illegal dumping crimes will start to complete more public service activities, like cleaning up illegal dumpsites, as the main portion of their penalty. Without these fines, the city will not collect funds that have been used to pay rewards in the past. Because the program is well established, the city believes it can rely on people's good will to report illegal dumpers.

Cleanup events usually involve large numbers of volunteers in litter pick-up or neighborhood cleanups. Some events are held in conjunction with national or state programs such as National Make a Difference Day or Earth Day. The scope of these events varies widely. Perhaps the most ambitious is Oregon's SOLV It, a one-day annual event that has cleaned more than four million pounds of debris from illegal dumpsites and neighborhoods since 1990.⁴³

New Mexico Governor Johnson's annual Trek-For-Trash involved many state and local organizations and groups to raise awareness about litter while cleaning up tons of litter each year. Many communities organized special clean up events to coincide with the Trek-For-Trash even though the community was not on the route taken by the Trek.

Picking up litter or cleaning up illegal dumpsites raises public awareness about the extent of the problem and improves the attractiveness of the community. On the other hand, in Philadelphia, Pennsylvania, a concerned citizens group organized an anti-dumping campaign to catch the dumpers and get the responsible parties to cleanup the mess or pay for its cleanup. They published a how-to manual entitled *Organizing Your Community Against Trash and Illegal Dumping*, which has many ideas that can be adapted to communities around the country.⁴⁴

Through its Clean Sweep program, Kansas City, Missouri has encouraged neighborhood cleanups in which residents participate in the planning activities and actual cleanup. By being involved in these efforts, neighbors have taken ownership of their communities and continued to work at keeping them clean.

⁴³ Sponsored by Stop Oregon Litter and Vandalism (SOLV). There are differing opinions with regard to the "usefulness" of annual cleanups. While annual cleanups help make the community more attractive; they may also send the "wrong" message. Some individuals may not stop illegally dumping their waste since they know that someone else will eventually cleanup the site.

⁴⁴ See Appendix A for how to receive a copy.

Some cleanup programs are designed as preventive measures. Chattanooga, Tennessee provides “Sparkle wagons” to its residents twice a year upon request. The wagon is a 20-foot trailer, which is parked at the residence for 24 hours and can be loaded with residential trash and bulky items. The city then hauls the wagon away and disposes of the trash at no charge. Like many other communities, Chattanooga also sponsors an annual community wide cleanup called Sparkle Day. Dumpsters are provided by the city and whole neighborhoods are cleaned up. These events have proved especially popular in low-income areas.

Cleanup events are good media opportunities. Lots of volunteers and lots of action are often attractive to television and radio stations as well as newspapers.

EVALUATION

All public education programs should be evaluated regularly. At least once a year, consider whether educational goals are being met, materials are still up to date, resources could be allocated more effectively, and what new education ideas might be added.

In order to evaluate success it is helpful to set measurable goals. Examples of goals might be: increase media coverage by 50%, give monthly presentations to schools, visit with cooperating agencies weekly, schedule presentations to community groups quarterly. Then, at the end of the year see which goals were met and where improvement is needed.

Keep track of the number of presentations, meetings, and special events at which information about environmental enforcement was disseminated. Have the public information staff or others assigned as media liaisons provide copies of all press coverage on illegal dumping.

Check the validity of phone numbers and any data on printed materials to ensure it is accurate before you reprint materials. Stay in touch with other environmental enforcement programs to share educational ideas. Use target audiences again to provide feedback on educational efforts. Meet with members of the respective target groups and ask for input on improving the materials.

SUCCESSFUL EDUCATIONAL STRATEGIES

Successful programs have many things in common. Among them are enthusiastic, creative, and dedicated staff members and supportive leadership. Below are the strategies which characterize many of these programs and that may guide the development of others.

Use the Environmental Enforcement Officer as an Educator

The environmental enforcement officer is the program’s most valuable asset and the best person to “sell” the program. The role as chief educator needs to be as important as that of chief investigator.

Officers will be primarily responsible for public presentations and educational efforts directed at the various audiences outlined earlier in this section, such as judges, prosecutors, local government officials and other law enforcement officers. In addition, environmental education includes presentations to children, in school settings as well as in the community. Such wide ranging audiences pose challenges that can be met with honest effort and preparation. Communications skills are also tested when answering the public hotline, responding to

newspaper reporters, and soliciting advice from colleagues in other environmental enforcement programs.

Given the level of public education and communications skills required by the job, such abilities should be considered when hiring an officer.

Recruit Supporters at Court

Often the best way to reach target audiences is to use another member of the “group.” Prosecutors, judges, and investigators attached to the prosecutors’ offices are often more likely to listen to other legal professionals explain an issue than to those outside the court system. Many successful programs use this fact to their advantage.

For example, in Philadelphia, the district attorney was recruited as a spokesperson for the illegal dumping prevention program. She was selected because she was known as a tough prosecutor who was respected by her colleagues. In private meetings, the district attorney was given background information about illegal dumping and made familiar with the state’s environmental laws. She was also presented with findings from the city’s economic impact study, which suggested that the lack of prosecution was exacerbating the illegal dumping problem and was costing the city millions of dollars. She was convinced. She became an outspoken advocate for the program and helped educate other prosecutors and judges as to the program’s merits.

Similarly, Houston’s assistant district attorney, whose caseload is solely dedicated to prosecuting environmental crimes, was instrumental in educating judges about the importance of hearing illegal dumping cases and in imposing stiff penalties. He and the civil prosecutors from Harris County have also made themselves available as a resource to other prosecutors in the region who are interested in pursuing illegal dumping cases.

Build Interagency Cooperation

Cooperation with other law enforcement officers is very beneficial. Informed officers can effectively extend the eyes and ears of the environmental enforcement program and provide assistance in identifying and arresting dumpers.

Law enforcement officers are often unfamiliar with criminal environmental enforcement since it is rarely taught at police academies. To encourage cooperation and understanding, environmental enforcement officers should plan to spend time educating their fellow peace officers. In Harris County, three environmental enforcement officers used roll calls and special law enforcement training sessions to spread the word about illegal dumping. In addition, materials and information received at environmental enforcement workshops can be shared with other peace officers.

Environmental enforcement programs also benefit from the support of other agencies, such as code enforcement, health department, fire marshal, streets and sanitation, road and bridge, animal control, etc. Environmental enforcement officers who spend time educating other agency staff about illegal dumping help extend the effectiveness of their programs and build working partnerships that benefit all parties. Such educational efforts may be formal or informal, but at a minimum should provide background information about illegal dumping and how and when to contact the environmental enforcement officer. The Environmental Crimes Unit in Kansas City, Missouri benefits from building cooperation with other city departments and state and federal

agencies. The Environmental Crimes Unit receives regular referrals from these departments and agencies for the investigation of illegal dumping crimes.

Target Adults and Children with a Wide Variety of Educational Materials

No successful program puts all its educational eggs in one basket. Effective education involves many different methods and many different venues. Audiences are reached at home, through their workplace, and through their after-hour activities – volunteer organizations, professional associations, churches.

Children are an important target audience. Again, they should be reached in school and through extracurricular activities like scouting or school clubs.

Good programs combine passive information sources with more active ones. Generally, all printed material is passive. Active information sharing takes place at public presentations, at booths set up during community events, or in the classroom.

Effective materials are kept up to date and periodically redesigned to keep them current and attractive.

CASE STUDY

South Central Solid Waste Management District, Missouri

In 1998, the South Central Solid Waste Management District (SCSWMD) started to identify all of the illegal dumpsites in the region. After completing the initial identification phase, the SCSWMD researched the names of property owners and sent them letters notifying them about legal disposal options in their county. The letters also notified the property owners that if the dumpsites would be cleaned up, the property would not be included in a list that would be provided to DNR and the county prosecutor.

After completing this project, the SCSWMD recognized that in order to expect residents to legally dispose of their garbage, there was a need to provide information about legal disposal options to the public. To encourage residents to properly dispose of and manage their garbage, the SCSWMD develops and distributes resource guides for each county in the district. These resource guides include information on where residents can take materials for disposal and recycling. The SCSWMD also encourages and promotes the use of drop-off centers for residential garbage disposal. Through these “buy-a-bag” programs, residents can typically purchase a specially marked garbage bag that they can use and then take to a specific drop-off location. Costs typically range from about \$0.50 to \$1.50 per bag. Some communities are also able to offer recycling bags, which are typically less expensive than garbage bags.

SYNOPSIS

- Education is critical to the success of environmental enforcement programs.
- A separate education budget should be considered part of the overall program costs.

- Environmental enforcement officers will function as the key educational personnel. As much as 50% of overall man-hours will be spent on education in new programs and 20-25% in established programs. Environmental officers will be able to dedicate the remainder of their time to actual enforcement cases.
- Other educational duties, such as writing press releases, scheduling public appearances, and planning special events may be handled by program administrators or other personnel with the necessary expertise.
- Multiple audiences should be targeted for education, including: elected officials, government staff, law enforcement officers, code enforcement officers and health department officials, prosecutors and judges, the local media, illegal dumpers, local businesses, and the general public. Educational messages should be developed that address the interests and needs of these various audiences.
- Messages should be clear and direct, such as “Stop Trashing Our Precinct” or “Illegal dumping is a crime.”
- A variety of methods should be used to get out the message including print and electronic media, and public presentations. Both adults and children should be addressed. Effective programs combine passive forms of education (brochures, fliers, posters) and more active forms (community meetings, booths at special events, presentations to school children).
- Hotlines are one of the most important public outreach tools. They increase public awareness about the program and provide valuable information about illegal dumping activity. Another method that directly involves the public is neighborhood cleanups.

SECTION 4

ENFORCEMENT AND PROSECUTION

The effective enforcement and prosecution of illegal dumpers under the state's illegal dumping laws and local ordinances is an essential component in making sure that a community's environmental enforcement program is a success. **If an environmental enforcement program does not have in place an effective process for enforcing the laws and prosecuting the illegal dumpers, the illegal dumpers will not change their behavior and the community will not see a reduction in illegal dumping.** These findings have been confirmed during conversations with a number of managers for environmental enforcement programs throughout the country.

The purpose of this section is to identify and discuss some of the enforcement and prosecution issues that can directly impact the overall success of a community's environmental enforcement program. This section will provide a series of recommendations with regard to each of these issues to assist local governmental officials in making sure their program's enforcement and prosecution of illegal dumpers is effective.

The reason for the less than desired success with the prosecution of these crimes is often due to a lack of communication with and education of the individuals who are involved in the enforcement and prosecution of these cases. Some of this confusion is due in part to the complexities of dealing with the environmental laws that address the illegal dumping crimes. In many cases, the prosecutors are familiar with the New Mexico penal code, but are not as well versed in New Mexico's environmental laws. This lack of familiarity with the law, as well as the perception by some prosecutors and judges that illegal dumping is not a "high priority" have been major factors in the lack of successful prosecutions of illegal dumpers in New Mexico, as well as nationally. Despite, these obstacles, environmental crimes are gaining increased attention at the local, state and federal levels. Increased funding is being provided at all levels of government as elected officials and policymakers begin to realize the severity of this crime.

To ensure that programs are operated effectively and efficiently, there is a need for increased coordination between local, state and federal environmental officials in gathering the necessary evidence to arrest the illegal dumper. For an environmental enforcement program to be successful it is important that all individuals involved in the enforcement and prosecution of illegal dumpers be willing to work together on a joint effort for the "common cause" of arresting all illegal dumpers. That means that city, county, solid waste management district, state and federal officials must be willing to work together. There is no room for "political positioning," "headline grabbing," or "foot dragging." If everyone does his/her job, everyone will be able to share in the credit – as well as a cleaner environment. This section of the manual provides guidance on what roles key enforcement personnel should have in order to develop an effective environmental enforcement program.

ENVIRONMENTAL ENFORCEMENT OFFICERS

The environmental enforcement officer is the front line of defense in combating illegal dumping. If the local government's program is going to be effective, in the battle against illegal dumping, it is essential that the enforcement officer position be staffed with the "right" individual and that

he/she be “positioned” within the local government in such a way that his/her impact is maximized. Listed below are a number of issues with regard to the enforcement officer’s position that local governments should be aware of in order to maximize his/her impact.

Officer’s Qualifications

The environmental enforcement officer is often the primary, if not only person, the general public will come in contact with when dealing with illegal dumping. Therefore, it is important that he/she present a professional image with regard to his/her position as an environmental enforcement officer. The officer should have the following qualifications:

- **Training.** The officer should have received sufficient training (at least 48 hours) so he/she is familiar with New Mexico’s environmental laws. The officer should be able to explain these laws to the general public, people cited for illegal dumping, and if necessary, capable of “educating” the local prosecutor with regard to these laws. (Sources for training will be discussed later in this section.)
- **Good Educator/Good Communicator.** In addition, to being knowledgeable in environmental law, the officer must be able to communicate well with all groups of people. Since a significant amount of the officer’s time (20-50% of the officer’s time, depending on the maturity of the program) will be spent educating the general public he/she must be able to communicate with school age children, neighborhood associations, business groups, etc. The officer must also be able to deal with illegal dumpers, in a professional manner. Finally, if the officer needs to assist in “educating” the public prosecutor(s) with regard to environmental law, it is essential that the officer be a good communicator.
- **Good Investigator.** To be an effective environmental enforcement officer, he/she must have not only good “policing” skills (ability to issue citations, make arrests, impound vehicles, etc.), but the officer must also be an excellent investigator. The officer must be a good detective and able to investigate the various illegal dumping scenes searching for clues that will lead to the identification of the illegal dumper. Skills include the ability to conduct surveillance, as well as to interview witnesses and suspects.

By retaining an officer with these qualifications, the program has a much greater chance of being successful in arresting, prosecuting and convicting illegal dumpers.

Commissioned Peace Officer Versus Code Enforcement Officer

There has been some debate as to whether the environmental enforcement officer needs to be a commissioned peace officer, or whether a code enforcement officer is sufficient.⁴⁵ In reviewing various environmental enforcement programs the authors found both types. Some programs were staffed with code enforcement officers, some with commissioned peace officers (police officers, sheriff’s deputies, and constables).

The use of a commissioned peace officer is typically the preferred approach since the peace officer is able to carry a weapon and has the ability to make arrests. An additional advantage is

⁴⁵ A code enforcement officer is **not** a commissioned peace officer and is therefore not able to carry a gun, nor can he arrest an illegal dumper. In some cases they may not be able to issue a citation.

that a police officer in uniform, carrying a weapon, lends credibility to the position and speaks to the seriousness of the violation and the importance of the program in general. In visiting with several cities that use code enforcement officers, they have arranged with their local police department to have peace officers made available to assist in arresting illegal dumpers. The concern with this type of arrangement is that the peace officers may not be available in a timely manner, thereby reducing the effectiveness of the code enforcement officer. The authors found that the City of San Antonio's environmental enforcement program is staffed within the Code Compliance Department, however the environmental enforcement officers are commissioned peace officers.

The authors would recommend that whenever possible, commissioned peace officers be used as the environmental enforcement officers due to their ability to carry a gun and make arrests. If an environmental enforcement program cannot staff the enforcement officer's position with a commissioned peace officer, then it is recommended that the environmental enforcement program have a very clear policy with the local police department, sheriff's department, or constable's office regarding back-up support and its ability to be provided in a timely manner to assist in the arrest of illegal dumpers.

Use of Rebuttable Presumption

The use of a legal concept known as "rebuttable presumption" argument may be helpful in prosecuting illegal dumpers. For example, information, such as mail with a person's name on it or a name from a license plate registration, can be used as a "rebuttable presumption." A "rebuttable presumption" means that the person identified from the mail or license plate committed the violation. While environmental enforcement officers and local prosecutors have used the "rebuttable presumption" argument to help gain convictions against illegal dumpers, it is important to note that in some cases use of this argument alone may not be enough to gain a conviction. One local prosecutor interviewed for this project commented that she would not be willing to go to court with only evidence such as a name from a license plate registration. However, by having evidence associated with the "rebuttable presumption" argument, along with other evidence, the probability of obtaining a conviction is enhanced.

Litter Control Officers

Another option to consider for enforcing illegal dumping laws is a county litter control officer. Several counties in the State of Missouri have started programs using volunteers litter control officers to control illegal dumping problems. Litter control officers are commissioned and have the responsibility to identify, document and develop cases against illegal dumpers. These officers can cite dumpers for violation of local ordinances or state illegal dumping laws.

Although litter control officers serve as volunteers, they still need to have experience and training in the enforcement of illegal dumping crimes. The person should either have a law enforcement background or be capable of getting the training needed to qualify as a county deputy. The case study on Wayne County, which is included later in this section, further addresses litter control officers.

Part-time Versus Full-time Enforcement Officers

Whenever possible, the authors would recommend that the environmental enforcement officer's position be a full-time position, rather than a part-time (half-time, quarter-time, etc.). The authors have found that when an environmental enforcement officer's time is split between environmental enforcement and code enforcement or some other duties, that the environmental enforcement program suffers. While some smaller counties might argue that the hiring of a full-time environmental enforcement officer is not economically feasible, and a part-time officer is the only viable method, the authors would strongly encourage the county to find a way to finance the full-time position. The benefits received from hiring a full-time versus part-time person will more than out-weigh the incremental expense associated with hiring a full-time person. Benefits received include: more time spent responding to illegal dumping reports, more time educating the public, more time in the field investigating illegal dumpsites, and more time conducting surveillance.

Location of Environmental Enforcement Officers

Another issue that must be resolved by the local community is where in the local government's organizational structure should the officer be staffed. As mentioned in Section 2 Management Structure, cities and counties have staffed these individuals within the code enforcement department, police department, health department, sheriff's department, etc. There is not a "right or wrong" answer with regard to the location of the environmental enforcement officer within the local government as long as illegal dumping is made a priority. The most important issue is that the environmental enforcement officer be staffed in a position that will allow him/her to maintain a close working relationship with the prosecutor (county attorney, district attorney, city attorney, etc.). As will be discussed in the following paragraphs, a key factor in maintaining an effective enforcement program is the ability of the enforcement officer and prosecutor to work together in bringing about the conviction of illegal dumpers in a timely manner.

PROSECUTORS

In the authors' meetings with both environmental officers and prosecutors the authors found that in those communities where there is a serious problem with illegal dumping, the prosecutors in those communities were usually unfamiliar with environmental law and with how to prosecute people who had been arrested for illegal dumping. One prosecutor said that she would like to prosecute these cases, but that she was unfamiliar with the law, and due to her backlog it made it nearly impossible for her to do the necessary legal research in order to prepare an illegal dumping case for trial.

Environmental enforcement officers said they find it frustrating when they arrest someone for illegal dumping, and then have the case dismissed, due to the low priority given these types of cases, or because the prosecutor is unfamiliar with the law as it pertains to illegal dumping. Listed below are a number of recommendations, with regard to the role of the prosecutor, that the authors would offer to any city or county considering the establishment of an environmental enforcement program. Any prosecutor, especially those new to environmental law, is strongly urged to take advantage of the resources described below.

Sample Pleadings and Other Legal Documents

One of the biggest challenges for prosecutors unfamiliar with environmental law is finding the time to do the legal research. If sample copies of pleadings, motions, etc., from prior environmental cases, are made available to the prosecutors, those documents would be of great benefit in helping them to prosecute environmental crimes. Copies of sample legal documents are available from the Attorney General's Office, Water, Environment and Utilities Division.

Prosecutor(s) Specialized in Environmental Law

Due to the fact that many prosecutors are not familiar with environmental law, the authors would propose that local governments consider having one prosecutor or a team of prosecutors (two or three) designated as the prosecutors responsible for handling environmental cases. Once they have received the proper training they will be capable of handling the environmental cases within their respective community. Depending on the number of cases, it may be determined that only one attorney needs to be trained in environmental law. The local government may also decide that having a team of attorneys familiar with environmental law is more time effective. For instance, in Palm Beach County, Florida, Ms. Gwen Key, Assistant State Attorney, specializes in environmental crimes, but also handles stock fraud, insurance fraud and travel agency fraud cases.⁴⁶ In California, rural counties are served by a "circuit prosecutor" to assist in prosecuting environmental crimes.

JUDGES/COURTS

It is important that the judges hearing the environmental cases be educated as well. One prosecutor mentioned during his interview with the authors that he had to educate some of the judges he presents his environmental cases before, due to their unfamiliarity with environmental law. The prosecutor mentioned that when he brings an environmental case before one particular judge, who he helped "educate," the judge is now familiar with environmental law and is known for being "tough" on those people guilty of environmental crimes. The importance of educating the judges cannot be underestimated. In recent years a municipal judge in Dallas, Texas wrongly dismissed hundreds of dumping-related citations because he said they should have been filed in state court.⁴⁷

Typically it is the prosecutor that must educate the judge, since he/she is the one bringing the cases before the judge. It appears that the most successful methods for educating a judge are by providing them with citations to the law and being available to answer their questions. The authors would propose that the judge also be provided with information about the environmental law training sessions described below and when they are being held so the judge can attend.

Judges may also respond to financial impact data on the costs of illegal dumping and the need to recoup some of the costs from violators.

While most environmental cases are heard in a typical "court" setting (i.e., before a judge or justice of the peace), some cities have established an administrative hearing process to hear only environmental cases. This has allowed those communities to speed up the legal process in pursuing these cases. Cities and counties that have this type of hearings process are listed in

⁴⁶ Refer to Appendix E, Article 3.

⁴⁷ Refer to Appendix E, Article 1.

Appendix C. In addition, some cities have established “environmental courts” where the case is still heard by a judge, but a certain day is set aside to hear only environmental crimes. This guarantees that the environmental cases will not get placed on the “back-burner” in favor of pursuing other criminal cases which are perceived as a “higher priority.”⁴⁸

Keep America Beautiful has materials to assist in the establishment of environmental courts, including brochures, a video, and information on their website at www.kab.org. Their web site provides information on how local governments can establish their own environmental courts. More than 25 American communities⁴⁹ have established the environmental courts. Their dockets are reserved exclusively for violations of local health, safety, housing, building, fire, solid waste and litter ordinances.

LEGAL ISSUES

Statutes Related to Illegal Dumping

Appendix D contains a detailed list of New Mexico statutes that address various illegal disposal issues. Additionally, about half of the 33 New Mexico counties have adopted some form of solid waste ordinance that addresses illegal disposal. A good solid waste ordinance that may be helpful for use by other local governments was developed by Bernalillo County.

Deciding Between Criminal and Civil Venues

As established in state law, the option exists to pursue illegal dumping crimes in either criminal or civil court. The decision to pursue cases criminally or civilly can depend on a number of factors.

Reasons to prosecute cases criminally include:

- Defendant may react more seriously to criminal charges than to a civil action.
- Prosecutor can send a letter to the defendant, advising him that he has 30 days to cleanup the illegal dumping before the prosecutor will file criminal charges.
- Convictions will be placed on the defendant’s record.

Reasons to file civil actions include:

- Can recover larger monetary damages that can be used to cleanup illegally dumped waste.
- Can require the defendant to cleanup the illegal dumping.
- The burden of proving a case is not as stringent as it is for a criminal case.

⁴⁸ The City of Chattanooga, Tennessee operates a court where environmental cases are heard by a judge every Thursday afternoon.

⁴⁹ For an updated list of these communities, contact Keep America Beautiful at (203) 323 – 5987 to request a copy.

- In following rules of civil procedure, defendant has several opportunities to cleanup the illegal dumping before having to go to court.
- In cases where a defendant does not comply with a judgment, the judge can still order the defendant to serve time in jail.
- A judge, not a jury, will hear the case.
- Defendant must obtain his own legal counsel.

For those cases where there is a large illegal dumpsite that is a chronic problem it may make sense to prosecute those cases in both a criminal and civil venue. The civil fines can be substantially larger than those described above, and the prosecutor is able to obtain a court ordered injunction with regard to the illegal dumping activity. In addition, local prosecutors can try the case in criminal court to obtain a jail sentence or other fine. For example, the authors were told by a prosecutor that in a hypothetical case of a homebuilder that was hauling construction scrap to an illegal dumpsite, she would probably prosecute that case in a criminal venue so she could obtain a court ordered injunction to close down the illegal dumpsite and then seek restitution in civil court from the homebuilder to assist in the monetary costs associated with cleaning up the illegal dumpsite. Corporations caught illegally dumping materials may prefer to be prosecuted in a civil venue, even though the fines can be higher, in order to avoid a criminal record.

The authors would recommend that local governments prosecute the cases under whichever venue will be the more effective in acting as a deterrent to future illegal dumping by the individual or company charged. To the extent that these cases are publicized, the publicity will let other potential illegal dumpers know that the local government is serious about prosecuting offenders.

TRAINING RESOURCES

In other states, agencies have developed, funded and promoted environmental law training sessions. These sessions provide a valuable tool for training the environmental enforcement officers as well as the prosecutors. Five years ago, a prosecutor would have had a difficult time finding an environmental law training session. However, due to the increased awareness with regard to environmental crimes, there are a number of agencies that are now sponsoring environmental law training sessions. These sessions can also explain why there is a need for enforcement of these laws. In many cases, the legal staff and judiciary are not familiar with the laws, and are not familiar with why enforcement is important.

Sources of information regarding environmental law and related environmental law training sessions are listed below. For those local communities establishing an environmental enforcement program, the authors recommend obtaining some of the materials listed below. The local government should also budget for key individuals within their local government's enforcement program to attend an environmental law training session, similar to the ones listed below.

- *National Enforcement Training Institute* – The mission of the National Enforcement Training Institute (NETI), which is a part of the U.S. EPA, is to train federal, state, local

and tribal lawyers, inspectors, civil and criminal investigators, and technical experts in the enforcement of the nation's environmental laws. Courses are available electronically and in locations throughout the United States. There is no charge for courses. Information about NETI can be accessed on the Internet at <http://es.epa.gov/oeca/ocft/neti.html> or (800) 372 – 6384.

- *Environmental Court Video* – This video explains the role and structure of an environmental court and comes with a brochure on environmental court planning. It is prepared by Clean Tennessee (an affiliate of Keep America Beautiful). Contact: Keep America Beautiful, (203) 323-8987 ext. 9199.
 - *Midwest Environmental Enforcement Association* – This nonprofit organization provides training on environmental enforcement issues for public agencies throughout the Midwest. Contact: Jim Trinner (847) 742 – 1249.
 - *Western States Project* – Like the Midwest Environmental Enforcement Association, this organization provides training on environmental enforcement issues for public agencies throughout the western states and publishes a quarterly newsletter *Western States News*. Contact: Thomas F. Fahey, Executive Director (602) 542-8512.
 - *Video Training Library; Southern Environmental Enforcement Network (SEEN)* – This video series is used extensively by environmental enforcement personnel. SEEN is a consortium of governmental agencies from 11 southern states. They have a newsletter, and many video resources. Contact: (205) 242-7369.
 - *Environmental Crimes Awareness for Law Enforcement* - This video is an introduction to environmental crimes and features several scenarios to illustrate the role of local law enforcement officers in the detection of environmental crimes.
 - *Illegal Dumping: Victimized Texas* – This video documents basics that enforcement officials need to know. It explains elusive illegal dumping problems, probable locations, etc. The video was funded in part by a Texas Natural Resource Conservation (TNRCC) grant and produced by the Lower Colorado River Authority (800) 776-5272.
 - *Harris County Precinct 3 Environmental Enforcement* – This video describes the unique illegal dumping problems found in Harris County. It also explains the role of the environmental enforcement officer. This video was funded in part by the TNRCC and produced in conjunction with Houston-Galveston Area Council (H-GAC). Contact: K&K Media, (713) 495-3691.
 - *Leaving Nothing But Your Tracks* - This video describes some of the issues facing Fort Bend County with regard to illegal dumping. The video explains the process for handling the prosecution of someone arrested for illegal dumping (arrest, filing of charges, court hearing, sentencing, etc.). The video is targeted toward junior high school students and above, including adults. This video was funded in part by the TNRCC and produced in conjunction with H-GAC. Contact: Deputy Sheriff Jim Winton, Fort Bend County Sheriff's Department, (281) 341-4620.
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- *Legal Aspects of Solid Waste Enforcement, Cameron County District Attorney's Office* – Partially funded by a grant from the TNRCC, this environmental law enforcement training course targets county judges and enforcement officers who work with solid waste and litter abatement cases. This course focuses on the major environmental protection statutes of solid waste enforcement. Contact: Cameron County District Attorney's Office, (956) 399-3679.

The above listing should not be considered to be a comprehensive listing of potential resources. While several of these training resources may reference specific statutes for other states, they can still serve as a valuable, yet general, resource for environmental enforcement professionals in the State of New Mexico.

NETWORKING

It is important that all individuals involved with the enforcement and prosecution of illegal dumpers remain current with regard to the State of New Mexico's environmental laws. Local environmental enforcement personnel should also network with personnel managing other environmental enforcement programs in order to learn about new strategies or approaches that have proven effective in battling illegal dumpers. Listed below are several groups that would be beneficial to contact. They are as follows:

1. **Midwest Environmental Enforcement Association** - MEEA is a consortium of 14 governmental agencies in the Midwest whose primary purpose is to assist local governments in the establishment of programs to help in the enforcement of environmental laws. They can be reached at (847) 742 – 1249.
2. **Western States Project** – Like the Midwest Environmental Enforcement Association; this organization provides training on environmental enforcement issues for public agencies throughout the western states. They can be contacted at (602) 542-8512.
3. **Other Environmental Enforcement Programs** – Environmental enforcement personnel (enforcement officers, prosecutors, judges) should keep in touch with their counterparts at other “successful” environmental enforcement programs. This will allow the personnel to benefit from any lessons learned at more experienced programs.

CASE STUDIES

Wayne County, Missouri (Litter Control Officer Program)

The first litter control officer program in the State of Missouri began in 1991 in Wayne County when a retired county resident approached the sheriff about the idea of a volunteer litter control officer. After completing 120 hours of law enforcement training, the resident was deputized as the county's litter control officer. Because he was deputized, the volunteer in Wayne County was able to carry a handgun. As litter control officer, his responsibilities included:

- Identifying and issuing citations to illegal dumpers.
- Supervising cleanup activities of individuals required to complete community service as a part of their sentence.

- Coordinating with local prosecutors and judges to process cases.

Based on the success of the program in Wayne County, several other counties in the State of Missouri started their own litter control officer programs.

One potential drawback about volunteer litter control officers is that the programs are often dependent on the efforts of an unpaid individual. If the volunteer person stops providing the service, it could be difficult to continue operating the program.

For further information on how to set up a program, refer to “County Litter Control Officer” publication 13, which is available from the DNR.

Jefferson County, Missouri

In 1986, Jefferson County adopted a solid waste ordinance to address illegal dumping problems in the county. Over the course of the next 14 years, the county has conducted more than 50,000 inspections, which have resulted in more than 10,000 corrections. In addition, the county has won all of the 131 cases it has tried in court. The program, which is currently located in the sanitation department, consists of a supervisor and two inspectors. One of the primary sections of the ordinance is to prohibit illegal dumping on one’s own property.

Unlike many other enforcement programs, Jefferson County pursues all of its illegal dumping cases in civil court. County officials believe that this venue provides the best opportunity for the county to ensure that sites are cleaned up and monetary damages can be recovered.

The key to success for the program lies in the systematic process for documenting cases. Through this process, county code enforcement officers extensively document problems and make several efforts to notify alleged illegal dumpers about possible violations. Efforts to notify illegal dumpers occur verbally during inspections and in writing after inspections occur. During this process, alleged illegal dumpers receive two letters notifying them about the problem. These letters provide the opportunity for the person to cleanup the dumpsite without facing further legal action.

If the site is not cleaned up, the case will be referred to the county prosecutor or counselor. When referring the case to the county prosecutor, the inspectors will have provided the prosecutor with the following information:

- Copy of the deed
- Copy of a petition
- Recent photos of the site
- File for the site, which includes inspection reports and copies of letters

Before the county counselor can file a civil law suit against the individual, he must receive authority from the county to do this. This occurs by formally asking the county commission for permission to file a civil action. After approval from the county commission, the county

counselor sends another letter to the person, providing them with another opportunity to cleanup the site. If the site is not cleaned up 30 days after the notice is sent, the counselor will file a civil lawsuit against the person seeking injunctive relief.

Prior to the court date, the counselor and inspectors will coordinate efforts to ensure that all evidence is in good order. In addition, inspectors will inspect the site a final time the day before going to court to ensure that the site has not been cleaned up.

With its thorough process, Jefferson County usually succeeds in having sites cleaned up prior to having to go to court. However, when the county has gone to court, it has never lost.

Other key components to the Jefferson County program include the following:

- Provide inspectors with proper training on conducting inspections and how to interact with the public.
- Promote legal disposal and recycling alternatives⁵⁰.
- Ensure that inspectors recognize problem situations and can call the sheriff's department for back-up assistance.

Appendix D includes legal and other documents provided by Jefferson County. These documents include four sets of letters that are sent to violators at different stages of an investigation. The appendix also includes several petitions that have been used by the county prosecutor.

Ozark Rivers Solid Waste Management District

Through its Trash Patrol program, the Ozark Rivers Solid Waste Management District (ORSWMD) helps its seven-member counties prosecute illegal dumping crimes. After receiving a call on its toll-free illegal dumping hotline, the ORSWMD will screen the information and provide it to the appropriate county commissioners and sheriff's department. The sheriff's department will then conduct an investigation. If the investigation produces evidence, like a person's name and address, the county commissioner will send a letter to the suspected illegal dumper. The purpose of the letter is to request that the person cleanup the illegally dumped materials.

If the person does not cleanup the dumpsite, the commission will send a second and more strongly worded letter. In cases where no response is received from the second letter, the case will be referred to the county prosecutor to file a civil suit.

Appendix D includes further detail about the program and sample letters that are sent to suspected illegal dumpers.

The City of St. Louis, Missouri

The Trash Task Force, which is located in the solid waste department, consists of nine off-duty police officers who use personal vehicles to conduct surveillance and enforce illegal dumping ordinances and laws. Task force members are carefully chosen and must be former detectives

⁵⁰ The Jefferson County brochure is referenced in Appendix A.

with experience investigating environmental crimes. The officers sign independent contracts to cover the 20 hours per week they spend on task force activities. They make arrests and contact on-duty officers using cellular phones to obtain backup or transport offenders. The task force also responds to citizen complaints received through the Citizens Service Bureau, which acts as a clearinghouse for illegal dumping questions and complaints. Since the program began in 1996, more than 650 arrests have been made.

The City of Kinloch, Missouri

When it comes to illegal dumping, the City of Kinloch has a policy of “zero tolerance.” All of the officers in the Kinloch Police Department are trained to enforce the illegal dumping laws of the State. When an officer catches a person conducting illegal dumping activities, the suspect is arrested. To make bail, a bond of \$500 must be paid. In addition, the vehicle used by the suspect is towed. In order to get their vehicle back, the suspect must also post a \$500 bond for the vehicle. When convicted, typical sentences require the person to cleanup the illegal dumping, pay a fine and pay a fee to legally dispose of the dumped material.

The Kinloch Police Department also relies on citizens to call-in and report illegal dumping incidents. When the police receive a good tip, they can often use the information as a basis to issue a warrant for the arrest of the suspect. The Kinloch Police Department also benefits from citizens who are willing to be witnesses in court.

Another reason for the success of the program in Kinloch is due to the coordination between the police department and the city attorney. By working together, they are able to increase conviction rates for illegal dumpers.

Kansas City, Missouri

The Environmental Management Department, which includes the city’s waste management activities, operates an illegal dumping enforcement program. Legal investigators in the Environmental Crimes Unit obtain tips from the department’s illegal dumping hotline and referrals from the city’s police and fire departments as well as from state and federal environmental agencies.

The investigators build and refer cases to the city attorney. Illegal dumpers can be prosecuted under a city ordinance that includes penalties of a fine up to \$500 and/or a jail sentence of up to six months. Because the legal investigators and the city attorney are very diligent in their work, the city has a conviction rate of 100 % for cases that have gone to trial. Being as prepared as possible, also helps the Environmental Crimes Unit build a strong relationship with judges presiding over illegal dumping cases.

SYNOPSIS

- Enforcement and prosecution is an essential component of program success. Unless illegal dumpers face the real threat of being caught and punished, their behavior is unlikely to change.
 - Environmental enforcement officers should be trained in environmental laws and have good communications and investigative skills. Full-time commissioned peace officers are preferred.
-

- Lack of effective prosecution is often a consequence of prosecutors being unfamiliar with environmental law. Many resources are available to remedy the situation including sample pleadings, environmental law training sessions, and advice from experienced environmental prosecutors.
- Judges are often unaware of the important role courts play in deterring illegal dumping. Prosecutors who are familiar with environmental law may be useful in educating judges.
- Some communities establish environmental courts or designate certain prosecutors as specialists in environmental law to assist in the effective prosecution of illegal dumpers.
- Environmental cases may be tried in both criminal and civil courts.
- Extensive training materials are available including workshops, videos, and publications.
- Effective programs involve active networking with other programs and pertinent professional organizations.

SECTION 5

CLEANUP

One of the key steps in maintaining a successful environmental enforcement program is making sure that the local government has an effective policy with regard to the cleanup of illegal dumpsites. It is important that the sites be cleaned up in as timely a manner as possible since trash left onsite attracts additional illegal dumping. The cost of cleaning up illegal dumpsites can be very expensive. In Dallas, Texas, an illegal landfill operation accepted waste from August 1994 to the fall of 1996. The site has now been closed; however, it is projected that it could cost \$20 million to cleanup about two million tons of waste at the site.⁵¹ While this may be a rather extreme example, it points out the importance of making sure that illegal dumpsites are not allowed to flourish in a community.

The purpose of this section is to present environmental enforcement programs with a number of options to consider in establishing policies with regard to the cleanup of illegal dumpsites. In visiting with environmental enforcement program managers, the authors found a number of different approaches used to handle cleanups. These various options will be discussed below. This section will also address how to keep these sites free of illegally dumped waste. Finally, this section will discuss some of the funding mechanisms available for financing cleanups and will provide some case studies concerning cleanup programs in other parts of the United States.

CLEANUP METHODS

Community Cleanups – Volunteers

One option that is often used when there is limited funding available to cleanup illegal dumpsites is the use of volunteers to do the actual cleanup. While this is a less costly method, it also requires a greater degree of preparation on the local government's part with regard to planning the event (issuance of announcements, coordinating the volunteers, finding corporations to contribute tools and equipment, etc.).⁵²

When working with volunteers, it is critical to emphasize safety issues. It is important that the volunteers are educated with regard to the proper procedures for collecting solid waste. For instance, it is vital to explain that if they discover what looks like a potentially hazardous waste material (55 gallon drums, containers filled with liquids, etc.) that they not touch those items, but let a professional handle those materials. Volunteers should also understand that they should not try to collect any materials that could potentially place them in a harmful situation or cause injury. For example, volunteers should not try to collect heavy items or dangerous materials such as sharp metal or broken glass.

Sources for volunteer labor can often be obtained from youth or civic organizations, as well as environmental groups located within the community. To the extent that senior citizens can be

⁵¹ Refer to Appendix E, Article 5.

⁵² Either the local government or a local community group/civic organization may coordinate the community cleanups. These types of cleanups have been successfully completed using both types of organizations to coordinate the cleanup.

used, they have been found to be a great asset in combating illegal dumping. Equipment (bags, rakes, gloves, shovels, etc.) can usually be borrowed from the local government or individuals can bring their own tools. Funding for the disposal of the waste materials collected can usually be obtained either from the local government or through corporate donations. Often the local landfill or transfer station will provide a one-day exemption from tipping fees for all waste brought in during the “cleanup day” by the organization coordinating the cleanup.

The Texas Natural Resource Conservation Commission has developed a planning guide that can be used by communities that are organizing events to help in litter cleanup, pollution prevention and illegal dumpsite cleanups. Any local government or community group considering the cleanup of illegal dumpsites with volunteers should obtain a copy of this guide.⁵³

Local Government Crews Conduct Cleanups

The most common method of cleaning up illegal dumpsites is the use of a local government’s own personnel and equipment. Most cities and counties that operate environmental enforcement programs typically budget a certain amount of money for disposal costs associated with the cleanup of illegally dumped waste. If the environmental enforcement program is part of a county government, it is usually the county’s road crews that are responsible for cleaning up illegal dumpsites. The disadvantage of this form of cleanup is that it often receives a low priority because the road crew’s primary responsibility is to repair and maintain the county’s roads and bridges. This can result in a low emphasis being placed on the cleanup of illegal dumpsites, which in the long-run may cost the county more money since illegal dumpsites that are not cleaned up will attract additional trash. Within city governments the individuals in the public works department or sanitation department are often used to perform cleanups. In general, while city crews tend to place a greater emphasis on cleaning up illegal dumpsites, cities also run the risk of having illegal dumpsites not cleaned up if those individuals are too busy with other responsibilities.

If the local government is going to have its own personnel cleaning up illegal dumpsites, it is imperative that the local government either dedicate crews to this sole responsibility, or at least designate individuals who are assigned on a part-time basis to cleaning up the illegal dumpsites. To have a truly successful environmental enforcement program, the local government must make the monetary commitment and assign personnel to the cleanup of illegal dumpsites. The cleanup of these sites needs to be a priority, rather than something to do when the city or county employees have “nothing else to do.”

Finally, it must be made clear from the start of the program that cleanup is not the responsibility of the environmental enforcement officer. In at least one case the authors reviewed, this lack of clarity led to misunderstandings and conflict between the officer and the cleanup crews.

Cleanups Mandated by Conviction

A number of local governments have used other sources of labor to cleanup their illegal dumpsites. Some local governments require that people caught illegally dumping, in addition to paying a fine, must also serve a set number of hours (also called “community service”) cleaning up illegal dumpsites. Newton County, Missouri has a successful program that requires any

⁵³ *Texas Environmental Event Planning Guide*, TCEQ (G1-157), September 1998. Call (512) 239 – 0028 to request a copy.

person convicted of illegal dumping to perform community service hours cleaning up litter on public property. For more detail about Newton County's program, refer to the Case Study section of this chapter.

Some cities and counties have used prison labor from the local city or county jail. These same entities have also used individuals who are required to complete a certain number of community service hours as part of their sentencing for DWI or other crimes.

KEEPING SITES CLEAN

Once the sites are cleaned up it is important that the local government keep these sites free of illegally dumped materials. Obviously, for many of the rural counties it is rather difficult to accomplish this task because of the "limitless" number of places in the rural county where waste can be dumped illegally. However, there are certain actions that even rural counties can take in an effort to reduce the amount of illegal dumping and to keep chronic dumping sites clean. These actions are as follows:

Posting of Signs

Perhaps one of the most cost-effective approaches is to post signs stating "No Dumping Allowed." The signs should also state the amount of the fine associated with illegal dumping, and if there is room, the sign should state where waste may be taken to be disposed of properly.

Lighting

For those areas that are chronically subject to late night dumping or "midnight dumping," providing streetlights in these areas can greatly assist in reducing the amount of dumping. Lighting increases the chances of the illegal dumper being seen and his license plate number being obtained, or vehicle identified.⁵⁴ This action to battle illegal dumping is most cost effective for cities versus counties due to the expenses associated with installing streetlights.

Barriers

Another option is for the local government to install barriers that prevent the illegal dumper from obtaining access to areas that have been convenient dumpsites. Examples of barriers would include highway dividers, fences, and landscaping. One county has even considered fencing off certain rural roads on which no one lives and which are currently only used to illegally dump waste.

Education

The importance of education in reducing illegal dumping has already been discussed in Section 3 Education. However, it is important to re-emphasize that by educating the general public as to the importance of reporting any observed illegal dumping activities the citizens can help in keeping chronic dumping sites clean. The use of senior citizens can be especially helpful since they tend to spend more time at or near their homes.

⁵⁴ *Illegal Dumping Prevention Guidebook*, U.S. EPA Region 5, March 1998, p.17.

Surveillance Cameras

Some cities and state agencies have placed video cameras to record acts of illegal dumping. Because costs for cameras can range from \$6,000 to \$15,000 local communities may want to purchase equipment together and share it. Another option would be to obtain surveillance equipment through the New Mexico State Agency for Surplus Property located in Santa Fe, (505) 476-1904.

Another concept has been to provide residents with disposable cameras so they can be used to photograph illegal dumpers.

Legal Action Against Property Owners

Injunctions against property owners should be considered for those sites on private property that are chronic sites of illegal dumping. The financial rewards to a property owner for operating an illegal site may be such that a periodic fine is not enough to keep them from allowing illegal dumping to continue on their property. Therefore, injunctions may be necessary to ensure that not only is a fine imposed, but that the dumping activity is curtailed. For example, Stone County, Missouri sent letters to property owners where large sized illegal dumps were located. In these letters, the county explained that the landowners needed to cleanup the dumps. Because the property owners who received the letters complied with the county's request, further legal action was avoided. Some local governments, including Jefferson County, Missouri, have sold properties in cases where illegal dumpers have not complied with court orders for cleanups.⁵⁵

Fine Illegal Dumpers

One of the best ways to prevent future illegal dumping is to impose significant fines on those individuals caught illegally dumping. It has been confirmed by numerous cities and counties that once an environmental enforcement program gets the reputation for fining illegal dumpers (with significant fines, not \$50 or \$100), and/or confiscating their vehicles, illegal dumping activity will decrease significantly.⁵⁶

If any waste is illegally dumped near areas where signs have been posted it is important that the waste be picked up as soon as it is identified. If the waste is left, it sends the message that people do not care about their community.

FUNDING OPTIONS

One of the biggest challenges to cleaning up illegal dumpsites is obtaining the necessary funds to finance the cleanup (labor, equipment, disposal costs, etc.). Listed below are some options that local governments may wish to consider pursuing. The authors would add that at this time, based on our interviews with environmental enforcement program managers, the primary source of funds for cleaning up illegal dumpsites will continue to be the local government's own financial resources. That means the funding will need to be typically provided either through the city or county's tax assessing powers, or utility fees.

⁵⁵ Refer to Appendix E, Article 11.

⁵⁶ Illegal dumping will especially decrease if the first few convictions and fines are well publicized in the local newspaper.

Local Funds

The primary source of funds for cleaning up illegal dumpsites will continue to be from the local government's own budget. However, in requesting these funds, the environmental enforcement program's manager should explain to the elected officials the benefits of cleaning up illegal dumpsites (health and safety considerations, reduction in criminal element, cleaner community, future savings by discouraging further dumping – which is expensive to cleanup, etc.).

State Funds

Some states provide financial assistance for the cleanup of illegal dumpsites. In the State of New Mexico, funds have not been available to provide for routine cleanup of illegal dumpsites. Emergency cleanup of relatively small hazardous waste sites has been funded through a contingency fund when there was an acute threat to both the environment and human health.

Supplemental Environmental Projects (SEP)

These projects occur when funds or services are made available through the settlement of an enforcement action by NMED against an alleged violator (respondent). The settlement can stipulate that the respondent complete an environmental project, such as cleaning up an illegal dump site, or provide funds for a third party to conduct the project. While this program is used only sporadically in New Mexico, it is one that environmental enforcement programs should consider.

Other

Two sources of funds that people are often not aware of are Keep America Beautiful and private waste companies. Keep America Beautiful receives grant funds from various sources, which are then distributed to Keep America Beautiful affiliates to assist in funding public education concerning illegal dumping. Private waste companies, through their landfill divisions, often provide funds or services, typically with regard to public education or community clean-up days.

DEALING WITH HAZARDOUS WASTE AND OTHER DANGEROUS MATERIALS

When dealing with illegal dumping problems, environmental enforcement officers will frequently come into contact with unidentified materials that could be hazardous waste or other dangerous materials. The illegal dumping of hazardous wastes is a problem both environmentally, and because it can be expensive to properly dispose of such materials. Only properly trained professionals should handle or otherwise come into contact with any materials that could potentially pose a threat to human health and safety. Environmental enforcement programs should coordinate efforts with the New Mexico Department of Public Safety, local fire departments and emergency response units to determine standard procedures for dealing with hazardous materials. In addition, local governments can contact the NMED's Spill Response Hotline or Hazardous Waste Bureau for assistance.⁵⁷

Another related problem has affected many communities in the State of New Mexico. These communities have experienced problems with the illegal dumping of chemicals or by-products used in making methamphetamines, which are synthetic amphetamines or stimulants that are

⁵⁷ Refer to Appendix F for information on how to contact NMED's Spill Response Hotline

produced and sold illegally. Environmental enforcement personnel in the state have encountered cleanup situations involving these illegal labs and chemicals. When dealing with these types of cleanups it is essential to use properly trained personnel because of the following issues:

- Making methamphetamines requires the use of poisonous, unstable, extremely flammable ingredients.
- Vapors that escape during the cooking process can be fatal.

Five or six pounds of toxic waste are created for every pound of methamphetamine cooked.

Hazardous Waste and Emergency Response Training

There are numerous opportunities for training courses to help individuals learn to identify hazardous materials and how to respond to an emergency. For information about future training opportunities, contact the Hazardous Materials Unit at New Mexico State Police, (505) 476-9682, or the NMED Hazardous Waste Bureau at (505) 428-2528.

CASE STUDIES

Listed below are several case studies of how communities have cleaned-up their illegal dumpsites.

Newton County, Missouri

Over the last four years, more than 500 people have provided approximately 16,000 hours of community service to collect litter along roads in Newton County. These activities have occurred as a part of the Newton County Litter Control Program. From what began as a simple effort to discourage illegal dumping in the county has evolved into a nationally regarded illegal dumping abatement program. This program, which is operated out of the county's Emergency Management Program, has two primary purposes. The first purpose is to enforce the state's littering laws. To do this, the manager of the Emergency Management Program, who is also a commissioned peace officer, investigates cases and cites people for littering. The second purpose of the program is to require persons convicted of violating state litter and other laws to complete community service hours by picking up litter in the county.

One of the reasons why this program is successful is due to how judges sentence people in the county. The two judges in the county include a certain number of hours of community service as a part of sentences. To complete the community service hours, they must collect litter on behalf of the Newton County Litter Control Program.

In overseeing the efforts of more than 500 persons completing community service hours, the key for the Newton County Litter Control Program was to develop a program that would be relatively simple to manage. When a person is required to complete community service hours, he must contact the Newton County Litter Control Program. The manager of the litter control program will instruct the person that he will be required to fill one bag of litter for every hour of community service required. The county will provide specially marked bags and assign specific stretches of road for the person to collect litter. After filling a bag, the person is to leave the bag on the side of the road and call the county to tell them where to pick up the bag. County staff will

then collect the bag(s), inspect the area to make sure it is clean, and take the bags to the county's recycling center.

At the recycling center, the contents of the bags are separated in order to recycle as much of the litter as possible. Also, by reviewing the contents of the bags, the county can tell whether the person really collected the trash required or if it came from another source, like the person's own garbage.

When individuals do not complete their community service by the deadline established by the judge, the Newton County Litter Control Program notifies the court. Several individuals have received sentences of six months in jail for not complying with the judge's original sentence.

The county is able to track the progress of efforts to complete community service with a computer database that allows monitoring of individuals, number of bags assigned and collected, and deadline for completion.

The State of Kentucky

The Kentucky Natural Resources and Environmental Protection Cabinet (KNREPC) was one of the first public agencies in the United States to use surveillance cameras to deter illegal dumping. The State of Kentucky places cameras in chronic illegal dumping locations, and uses photos to track down suspects. The agency has a good track record of being able to identify suspects using photos from the surveillance cameras. After catching an illegal dumper, KNREPC investigators will issue a notice of violation to offenders who will have the option of cleaning up the dump within two weeks and signing up for collection service or appearing before an administrative hearings officer. The hearings officer will determine the penalty, which could be \$5,000 per day.

Photos also serve as a strong deterrent, as the KNREPC posts pictures of suspected illegal dumpers on the agency's web site (<http://www.nr.state.ky.us/nrepc/dumpphotos.asp>). By knowing that cameras could capture them engaging in illegal dumping activities, people are looking for legal options to dispose of their garbage.

The State of Pennsylvania

Pennsylvania CleanWays is a nonprofit organization that helps communities cleanup illegal dumpsites in rural areas. Prior to cleanup and as a condition to providing assistance, Pennsylvania CleanWays works with everyone involved to develop a plan to remove any materials dumped after the cleanup. The "subsequent dump team" is made up of residents, law enforcement officials, businesses, trash haulers, and landfill operators. Residents are taught what evidence to look for, who the responsible enforcement officials are, how to contact them, and how to remove trash if necessary. Residents bag and pile trash to make it easy for those who have agreed to haul it away. To date, the program has cleaned up over 40 rural sites and 500 truckloads of waste. Contact: Sue Wiseman, Pennsylvania CleanWays, (412) 836-4121.⁵⁸

⁵⁸ *Illegal Dumping Prevention Guidebook*, U.S. EPA Region 5, March 1998, p.17.

Cook County, Illinois

The Department of Environmental Control, Sheriff's Department, Highway Department, and Forest Preserve District partner with communities to cleanup and maintain problem dumpsites. Labor is provided by the Sheriff's work assistance program, and the Forest Preserve District provides heavy equipment. Waste is transported for proper disposal and sites are secured with concrete barriers by the Highway Department. Contact: Charles Lagges, Department of Environmental Control, at (708) 865-6165.

Barberton, Ohio

The city health department presented certified cleanup orders to owners of an illegal dumpsite. The vacant 2-acre site, which was located in a heavily wooded area near a residence, contained 15-foot high piles of household waste and scrap tires. Several drums of hazardous waste were discovered during the cleanup. The city forced the owners to hire a contractor to cleanup the site and authorized funding to cover about half the cost, in order to accelerate the cleanup. The entire cost of the cleanup, estimated at \$80,000, was recovered from the owners. Contact: Mike Meusel, Health Department, (330) 745-6067.

The State of Oregon

Oregon's SOLV (Stop Oregon Litter and Vandalism) is a 30-year old non-profit organization that sponsors a statewide cleanup of illegal dumpsites and neighborhoods called SOLV IT. Since 1990, SOLV IT has removed 6.2 million pounds of solid waste, woody debris, and litter from Oregon counties using all volunteer labor. Contact: Jack McGowan, Executive Director, SOLV, 503-844-9571.

SYNOPSIS

- Cleanup of existing illegal dumpsites is integral to enforcement programs.
- Options for cleanup include the use of volunteers, city or county crews, prisoner or community service labor and/or the use of SEPs to offset the cost of cleanup crews and materials.
- Methods for keeping sites clean include signs, lighting, barriers, education, and surveillance.
- The primary source of funding for cleanups is local government. Limited funds are available through dumping fines.

SECTION 6

PROGRAM ADMINISTRATION

Once the environmental enforcement program is operational, there are four primary areas of responsibility that the manager of the environmental enforcement program (manager) will need to address on an on-going basis, in order to ensure the program remains a continued success. **These four areas of responsibility must be addressed on an on-going basis.** The four primary areas of responsibility are as follows:

- Completion of general administrative duties and tasks
- Management of financial resources
- Monitoring of key operating activities
- Review of overall program effectiveness

In reading this section, the reader will notice that each of the areas of responsibility has a number of tasks listed beneath it. Based on the size of the environmental enforcement program, some of these tasks will need to be addressed on either a quarterly, monthly, or weekly basis. The authors have listed what the authors perceive to be the primary tasks within each of these four areas of responsibility. As individual cities and counties establish their own environmental enforcement programs, they will most likely need to add additional tasks to this list.

COMPLETION OF GENERAL ADMINISTRATIVE DUTIES AND TASKS

This area of responsibility describes the tasks that will need to be accomplished by the manager on an on-going basis to ensure the effectiveness of the environmental enforcement program. Most of these tasks entail making sure that all areas of the program (education, enforcement, prosecution, cleanup, etc.) are functioning smoothly and have not run into any “roadblocks” which would limit their effectiveness in accomplishing their various goals. As mentioned earlier, this is only a listing of the primary tasks, the reader will most likely need to add additional tasks to this list. The tasks are as follows:

- The manager will need to monitor the education program to ensure that all audiences are being educated, on a continual basis, about the adverse impact that illegal dumping has upon their community (health and safety issues, economic impact, crime, etc.). These audiences will include:
 - elected officials
 - law enforcement officers
 - code enforcement and health department personnel
 - prosecutors
 - judges
 - local environmental groups (Keep Kansas City Beautiful, etc.)
 - general public
 - local media
 - illegal dumpers

The importance of an effective education program cannot be over-emphasized. As mentioned in, Section 3 Education, the education program is on-going. An effective enforcement program will educate its citizens throughout the life of the program, not just in the “start-up” years. **An effective education program is one of the most important elements to the operation of a successful environmental enforcement program.**

- The manager must be sure that telephone calls from citizens about illegal dumpsites are being received at the proper location within the local government and are then routed in a proper and timely manner to the enforcement officers. The manager must also make sure that environmental enforcement officers respond promptly to the citizens’ calls.
- The manager must ensure that the environmental enforcement program is coordinated with the city or county’s comprehensive solid waste management plan. **In order to have an effective environmental enforcement program; citizens must know how to properly dispose of their waste. If the general public knows how to properly dispose of their waste, illegal dumping will decrease.**
- The manager must schedule on-going visits (unstructured) as well as meetings (structured) with all individuals involved in the program to make sure that all departments within the city and/or county are working together effectively in the battle against illegal dumpers. For instance, if the environmental enforcement officer’s cases are not being prosecuted by the county attorney, the manager must determine why, and help the two parties arrive at a solution. Any “friction” between the various departments within the city and/or county governments can result in the enforcement program’s effectiveness being hampered.
- On an on-going basis, the manager should review the existing operational procedures of the program to see if the program’s procedures need to be modified, or “tweaked” in order to maintain the program’s effectiveness.
- One of the manager’s key responsibilities will be to act as a liaison between the various departments within the various city and/or county governments to make sure that the environmental enforcement program continues to be an effective tool in combating illegal dumping.
- The manager must remain current with regard to any changes, or proposed changes, in the local or state regulations which could affect the local government’s environmental enforcement program.

MANAGEMENT OF FINANCIAL RESOURCES

- The manager will be responsible for creating an annual budget for the environmental enforcement program. This should include all budgeted costs associated with operating the program, both direct and indirect costs. This budget should include all of the costs to be incurred by the local government in operating the program (education, enforcement, prosecution, cleanup, etc.).
 - At least once a year, the manager must determine the actual costs incurred with regard to the environmental enforcement program and compare the actual costs incurred with the budgeted costs that were projected at the beginning of the fiscal year. Depending on the
-

size of the program, the authors would propose that the actual financials be updated quarterly, and possibly monthly. The more frequently the costs are updated, the sooner the manager will be able to identify any potential aberration in the costs of the program, and avoid any cost overruns, which could jeopardize the financial integrity of the program.

- **The authors would strongly encourage any local government that is considering establishing, or has already established an environmental enforcement program to use “full cost accounting” to determine the costs of operating the program.** Appendix B provides a list of the full cost accounting publications that show how a local government may use this methodology to determine the annual costs of operating an environmental enforcement program.⁵⁹ During our survey of environmental enforcement programs (Appendix C), the authors found that the vast majority of the program managers did not have a clear idea as to what their program cost was in total.⁶⁰ The U.S. EPA has also developed several documents related to full cost accounting. These documents and other resources can be found on U.S. EPA’s web site at <http://www.epa.gov/epaoswer/non-hw/muncpl/fullcost/docs/epadocs.htm>. Additionally, EPA Region 5 has developed a cost model that can be utilized to assess cleanup costs (see Appendix B).
- Using the budgeted versus actual costs for the program (as calculated using full cost accounting – described in the previous two tasks), the manager should track the costs for each of the various “program categories” within the environmental enforcement program. A “program category” is defined as the following:
 - Education
 - Enforcement Officers
 - Prosecution/Courts
 - Cleanup
 - Administration
 - Other

Using these program categories, the manager can then determine whether there are any significant aberrations between what is budgeted for a particular program category versus the actual costs incurred. For instance, if the environmental enforcement officer’s “actual costs” versus “budgeted costs” are significantly higher during the first quarter of the fiscal year the manager can visit with the officers to find out why these costs have increased. It may be that the local government is seeing an increase in the number of illegal dumping complaints received, resulting in more illegal dumpsites to be investigated by the officers, which is resulting in overtime. By using full cost accounting, these deviations in costs can

⁵⁹ The full cost accounting methodology described in Appendix B for determining the cost of operating an environmental enforcement program is consistent with the methodology developed by the authors for the TCEQ in the *Municipal Solid Waste Services Full Cost Accounting Workbook*, TCEQ, (RG-127), April 1995. A copy of this workbook (or any other TNRCC documents mentioned in this manual) can be obtained by calling the TCEQ at (512) 239-0028.

⁶⁰ The primary reason for not knowing the total program’s costs is that the programs typically use personnel and equipment from various departments within the city or county government and therefore the costs for these resources are “buried” within the budget for each department. Full cost accounting is a methodology to “unbury” those costs and determine the true cost of the environmental enforcement program.

be identified early on and addressed, thus avoiding a potentially significant budget shortfall.

- The manager should actively pursue any grant funds that may be available from the U.S. EPA, the NMED, the local SWMD, or any other governmental agency. These funds can be used to help in financing the environmental enforcement program. The local government may also partner with non-profit organizations to receive grant funds from private and foundation sources, especially for education programs. However, the manager, as well as the elected officials of the local government must realize that government and non-government grant funds are typically provided to help “start-up” an environmental enforcement program, or expand the services offered by the program, but should not be considered a financial tool that can be used to finance the program over the long-term.
- As mentioned in the previous task, grant funding can be a valuable tool when starting-up an environmental enforcement program. **However, grants are not to be used to finance these programs indefinitely. Eventually, the local government must make the financial commitment to finance the program because it believes the benefits of the program far out-weigh the costs of the program.** Options that the manager may wish to consider using in financing the environmental enforcement program are the following:
 - Ad valorem taxes
 - Solid waste user fees
 - Tipping fees
 - Grants (short-term only)
 - Supplemental Environmental Projects (SEPs)
- Local governments may also need to identify several funding sources in order to operate an enforcement program. With funding being available from multiple sources, local governments may need to obtain funds from different department and agencies. For example, the litter control program in Newton County, Missouri is operated under the county’s emergency management program with funding provided from several different county programs as well as from the regional solid waste management district.

MONITORING OF KEY OPERATING ACTIVITIES

In order to ensure that the city’s program is effective, it is essential that the city track the necessary key operating data so the success of the program can be measured. Data should also be used in educational efforts as appropriate and to help target messages. Listed below are the tasks that need to be completed in order to monitor the operational performance of the program.

- The manager should construct a mapping system that will allow the local government to track the physical location of illegal dumpsites. Using a grid, the city or county could be divided into numbered sections. This method, used by Harris County Precinct Three, Texas, helps identify problem areas, and the section numbers can be included as part of the illegal dumping case number by the enforcement officers. Harris County case numbers include the precinct number, section number, and a “C” or “P” to designate whether the dumping is on county or private property. In addition, these dumpsites could be cataloged by type (e.g. residential, commercial, brush trimmings/yard waste, C&D,

hazardous, etc.). To the extent repeat complaints arise about additional waste being dumped at a site already catalogued, this information should be noted. This will help identify the “chronic” dumpsites. Surveillance can be increased in the “chronic” areas, thus increasing the city or county’s chances of catching the illegal dumpers in the act.

- The manager needs to begin developing a database of “key activities” which will allow him/her to measure the performance of the program. Data which should be tracked in this database includes, but is not limited to the following:
 - number of complaints received regarding illegal dumping
 - number of complaints received regarding littering⁶¹
 - number of sites found by surveillance
 - number of warnings issued
 - number of citations issued
 - number of court cases tried and concluded
 - number of convictions
 - dollar amount of fines
 - number of dumpsites cleaned up through actions
 - cubic yards (or tons) removed through cleanup enforcement
 - number of training activities attended and conducted
 - number of community education activities attended and conducted

- If the local government has access to a GIS system, this system should be used to overlay the dumpsites identified on the mapping system (described in the previous task), where they can then show the proximity to water sources (lakes, streams, creeks, wells, etc.), schools (increased chance of injury to children playing in the area), etc.

The data captured in the local government’s database, and mapping system should be updated on either a weekly or monthly basis. This data should then be tabulated in a report that will allow the manager to track the key activities associated with the program.

Listed below are the summaries of two examples that show the importance of monitoring key activities, and how that data can then be used to capture illegal dumpers.⁶²

Detroit, Michigan

Illegal dumping data from police files and court records was evaluated. Arrest records revealed that 72% of the dumping arrests occurred between 5:00pm and midnight, 57% of the dumping arrests took place on Tuesdays and Wednesdays, 66% of the vehicles used were pickup trucks, and 90% of the offenders resided within the city. The data was used to make adjustments in surveillance schedules and tactics. Court records revealed that 62% of the offenders did not pay fines imposed and were issued lien warrants. Contact: Gregory Moore, Environmental Affairs Department (313) 237-3095.

⁶¹ For purposes of this manual, litter is considered to be those small items (as defined in Statute 577) which are frequently tossed from a vehicle and found along roadsides. Illegal dumping (as defined in Statute 260) is the illegal disposal of larger items where often an individual stops his vehicle in a remote area to unload garbage bags, old furniture, appliances, construction debris, etc.

⁶² *Illegal Dumping Prevention Guidebook*, U.S. EPA Region 5, (EPA905-B-97-001), March 1998, p.30.

East St. Louis, Illinois

New Spirit, a community organization, uses hand-drawn maps of individual neighborhoods to compile information on scrap tire piles, abandoned housing or vehicles, and buildings requiring demolition. Such areas tend to attract illegal dumping. Community members use the maps to obtain funding for demolition, coordinate cleanup and prevention efforts, and raise awareness among resident and government officials. Contact: New Spirit, (618) 874-0312.

REVIEW OF OVERALL PROGRAM EFFECTIVENESS

On either a semi-annual or annual basis the manager should review the environmental enforcement program to determine whether the program is meeting its stated objective: the reduction of illegal dumping within the community. To assist in this review, the manager should review the tasks within each of the three primary areas of responsibility:

- completion of general administrative duties and tasks
- management of financial resources
- monitoring of key operating activities

The previous pages of this section have provided a detailed description of the key tasks within each of these primary areas of responsibility. By reviewing these tasks, the manager can begin to evaluate the performance of the program. In particular, Responsibility C: Monitoring of Key Operating Activities, will provide a wealth of data to help the manager in evaluating the performance of the program.⁶³

In addition, the authors have identified four key components to a successful environmental enforcement program. They are as follows:

1. Waste collection, recycling, and disposal alternatives
2. Public education and community awareness
3. Enforcement and prosecution
4. Cleanup of existing dumpsites

SYNOPSIS

- Program administration must be addressed on an on-going basis. The four areas of major responsibility for managers are: administrative, financial, data monitoring, and evaluation.
- Administrative duties include oversight of the education program, the citizen call-in system, integration with other solid waste management programs, and general operational procedures. The administrator is also the liaison between the department and other agencies.
- Financial duties include preparation of the annual budget, tracking of actual versus budgeted expenses, and identifying available funding sources.

⁶³ Therefore, it is critical that the manager take the time at the beginning of the program to put in place the necessary tools (computers, etc.) that will allow him/her to create the databases that will allow him/her to track the financial performance, as well as operational performance of the environmental enforcement program.

- Managers should develop and maintain a database of “key activities” which can be used to measure the effectiveness of the program. Such data should include the number of complaints received and cases prosecuted. Dumpsites should also be mapped.
- Data should be used to help evaluate the overall program effectiveness.

APPENDIX A:
SAMPLE BUDGET, EDUCATIONAL MATERIALS
AND REFERENCES

The following budget was designed for a start-up education program for a rural county with a limited budget. It may be considered a minimal education budget.

ANNUAL EDUCATIONAL PROGRAM BUDGET

Item	Description	Cost
Brochure	Estimate includes writing, design, and printing of brochure. Quantity 10,000 in 2 colors on recycled paper. Design costs may be contained by using desktop publishing software.	\$1,500-\$2,000
Press Releases	Estimate based on 5 hours per press release at \$15/hour of direct salary and benefits charged to program, or for contracted services. Based on 12 press releases/year.	\$1,000
Fliers	Estimate is for copying costs of producing fliers for community events and general distribution to specialized audiences. Based on 2,000 copies.	\$100-\$150
Display	Estimate based on lightweight, Velcro-type, three-panel tabletop display. (\$200) and photos or artwork for display (\$200).	\$400
Slide show	Estimate based on taking and developing slides, and writing of slide script for public presentations. Based on 30 hours at \$15/hour for public information personnel or contracted services.	\$450
TOTAL	All items above.	\$3,450 - \$4,000

SAMPLE BROCHURES

A sampling of educational brochures from other states was included in the original MDNR manual. They may be obtained from their originators to help write or design a brochure tailored to local environmental enforcement programs.

A listing of the brochures and key contact names follow.

Ozark Rivers Solid Waste District
Trash Patrol – (800) NO2-DUMP
Tamara Snodgrass
(573) 265-2993

City of Chicago, Illinois
Stop Illegal Dumping
Brendan Daley
(312) 742-0150

City of Houston, Texas
Rat on a Rat
Sylvia Brumelow
(713) 654-6102

Operation Brightside
Stop It! Don't Drop It!
Mary Lou Green
(314) 781-4556

North Central Texas COG
Stop Illegal Dumping In Its Tracks
Charlotte Ross
(817) 695-9229

PhilaPride
The Untrashables (comic book)
(215) 575-2210

Texas Commission on Environmental Quality
Let's Work Together to Stop Illegal Dumping
(512) 239-0028

Jefferson County, Missouri
Recycle Today... For Tomorrow
Diana January
(314) 797-5043

SAMPLE NEWS RELEASE⁶⁴

FROM: (Contact person and telephone number)

DATE: (Date sent out)

TAKING OUT THE TRASH? MAKE IT LEGAL

Tossing trash along a riverbank or in the woods is illegal for good reason, says (name of county/city official or environmental enforcement officer). It's also illegal to let refuse blow from the back of pickups and trucks. That's because trash that ends up along roads and waterways can cause extreme damage to the environment, animals, and humans. Trash spoils the natural beauty that characterizes (your county/city). And people who litter will choose to throw their garbage into areas where trash has already accumulated.

"In the long run, illegal dumping costs a lot more than it costs to collect and dispose of these items legally," (name of local official or environmental enforcement officer) says.

The first thing to do is to cut down the amount of your garbage which needs to be disposed of by separating out the materials that can be recycled locally. In (name of city/county), (list what can be recycled) are recyclable. (Explain how and where people can recycle locally, including hours of operation).

"If items like broken furniture, surplus building materials, or large, old appliances, are too worn to be given to someone else who can reuse or repair them, they should be disposed of legally," (name of local official or environmental enforcement officer) says. To find out how to correctly throw away these items in (your county/city), call (county/city) Solid Waste Department (telephone number).

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⁶⁴ *Combating Illegal Dumping*, Oregon Department of Environmental Quality, Solid Waste Programs, July 1996, p.9.

HAZARDS AND NEGATIVES ASSOCIATED WITH ILLEGAL DUMPING

Health Risks

- Drinking water quality issues related to non-point source pollution (especially in areas with private wells)
- Flooding caused by debris/wastes that clog drainage ditches and waterways
- Habitat/breeding grounds for disease-carrying vectors
- Indirect exposure to toxic chemicals/hazardous wastes
- Inhaling pollutants carried by smoke from open burning (“burn barrels”, etc.) and dump fires
- Direct contact exposure to sharp objects, medical wastes, caustic substances, and fire (especially a risk for children playing in the areas)

Environmental Risks

- Groundwater and surface water contamination
- Air pollution
- Impact on wildlife and aquatic habitat

Financial Costs

- Financial burden on taxpayers and utility ratepayers
- Diversion of local staff and equipment resources from other local public needs (public works staff, police, public attorneys)
- Increased law enforcement costs
- Increased administrative costs
- Private sector business costs
- Private property owner cleanup costs
- Property devaluation and potential loss of opportunities to develop land and attract additional business opportunities (such as tourism)
- Lost disposal revenues at permitted public and private disposal facilities (illegally dumped waste bypasses billing system)
- Reduced local government tax revenue from less successful permitted private disposal facilities (wastes bypassing billing system)

Aesthetic Costs

- Offensive sights and smells
- Negative perceptions of community values of residents
- Negative perceptions of capital investment value by potential new businesses

PUBLIC EDUCATION REFERENCES

City of Chicago

Department of Environment

30 N. LaSalle Street, Ste. 2500
Chicago, IL 60602-2575
(312) 744-8096
www.ci.chi.il.us/WorksMart/Environment
Contact: Carmen Driver

City of Houston

Neighborhood Protection Program/ Rat on a Rat

2931 W. 12th St.
Houston, TX 77008
(713)654-6102
Contact: Tom Collins

Franklin County District Board of Health

410 High Street
Columbus, OH 43215-4562
(614)462-3160
Contact: Mitzi Kline

Harris County Precinct Three

Environmental Enforcement Division

16635 Clay Road
Houston, TX 77084
(281)371-0566 or 0565
Contact: Captain Ted Heap

Kansas City Clean Sweep

Environmental Management Department
324 E. 11th
Kansas City, MO 64106
(816) 513-3490

Keep America Beautiful

www.kab.org

Kentucky NREPC

Cleanup Kentucky

14 Reilly Road
Frankfort, KY 40601
(502) 564-6716

North Central Texas COG

P.O. Box 5888
Arlington, TX 76005-5888
(817)695-9229
www.nctcog.dst.tx.us
Contact: Charlotte Ross

Operation Brightside

2375 Hampton Avenue
St. Louis, MO 63139
(314) 781 - 4556

PhilaPride

1818 Market Street, Ste. 3510
Philadelphia, PA 19103-3681
(215)575-2210
Contact: Mark Vigiano, Executive Director

Solid Waste Authority

Palm Beach County

7501 N. Jog Road
West Palm Beach, FL 33412
(561)697-2700, Ext. 4701
Contact: Joanna Aiken, Community Service Coordinator

Stop Oregon Litter and Vandalism (SOLV)

P.O. Box 1235
Hillsboro, OR 97123
(503)844-9571
info@solv.org
Contact: Jack McGowan, Executive Director

Texas Commission on Environmental

Quality (formerly: Texas Natural Resource Conservation Commission)

P.O. Box 13087
Austin, TX 78711-3087
(512) 239-1000
www.tnrcc.state.tx.us

APPENDIX B:
ENVIRONMENTAL ENFORCEMENT
FULL COST ACCOUNTING

Sound financial management is critical to a successful environmental enforcement program. Elected officials, program managers, and citizens benefit from having accurate information when assessing the effectiveness of the program and in developing budgets. The following resources are highly regarded as being able to assist in the recognition of all costs associated with these programs:

Municipal Solid Waste Services Full Cost Accounting Workbook, TCEQ, (RG-127), April 1995. A copy of this workbook (or any other TCEQ documents mentioned in this manual) can be obtained by calling the TCEQ at (512) 239-0028.

Full Cost Accounting for Municipal Solid Waste Management: A Handbook, EPA 530-R-95-041, and ***Pay-As-You-Throw Tool Kit***, EPA 530-R-96-013. Both of these publications can be ordered through the RCRA Hotline at (800) 424-9346.

Illegal Dumping Economic Assessment (IDEA) model, an MS Excel spreadsheet that can be used to determine cleanup costs is available on-line from the U.S. EPA Region 5 website:

<http://www.epa.gov/region5/illegaldumping>

IDEA Cost Estimating Model User's Guide and ***IDEA Model Fact Sheet*** are companion publications that may be downloaded from the same website.

APPENDIX C:
SYNOPSIS OF ENVIRONMENTAL ENFORCEMENT PROGRAMS
THROUGHOUT THE UNITED STATES

The authors conducted a survey of cities and counties throughout the United States that have environmental enforcement programs. While this survey is not meant to provide a comprehensive review of how local governments in the United States deal with illegal dumping, the survey is helpful in affirming some of the recommendations proposed by the authors. A detailed description of some of the entities interviewed is provided below.

Appendix C also includes a table of contact names and telephone numbers of local governments included in the manual and in this appendix.

Lee County, Florida

- Lee County collects a \$.60 per ton surcharge for all solid waste. These funds are earmarked to finance an environmental enforcement program that currently costs \$150,000 per year. The program funds four deputies and their transportation costs in order to cover the 575 square mile county. Each of the deputies works in a decentralized manner patrolling the existing illegal dumpsites within his/her own quadrant.
- Each deputy also specializes in a specific waste material⁶⁵ and maintains current knowledge on safety, recycling and disposal of those waste materials. Strong lines of communication throughout the county allow the deputies to share knowledge of specific waste materials, and apply the proper safety and enforcement procedures.
- The Lee County deputy who specializes in the disposal of tires designed an aggressive program that has successfully removed thousands of illegally dumped tires⁶⁶. The county found a vendor who recycled tires into useful products such as sports turf, mulch and weed mats around road signs. The county had one of their parks resurfaced with the spongy, shock absorbing matting, which is safer for children to play on than conventional surfaces.

Jackson, Gallia, Meigs, and Vinton Counties, Ohio – Solid Waste Management District

- The four rural counties surveyed in Ohio formed a joint Solid Waste Management District to combat illegal dumpers in the southeast region of the state. Each county has a sheriff's deputy who spends 20 hours per week on illegal dumping issues. A surcharge on tipping fees funds the equivalent of half a sheriff's deputy per county to enforce illegal dumping.
- The Solid Waste Management District (District) has significant problems with construction and demolition debris from the county's own residents. Typically, high growth counties have problems with C&D, but the rural southeast region of Ohio has recently endured severe flooding; therefore, homeowners have been gutting and repairing their homes and illegally disposing of the materials.
- Tires have been the other concern of these counties. The District has become a target for illegal commercial tire dumping. Companies load tires in unmarked covered trailers in Columbus, Ohio and dump the tires in the rural counties within the District. These acts

⁶⁵ i.e., hazardous waste, tires, construction and demolition and household solid waste.

⁶⁶ 1,801 in 1993 alone.

have been nearly impossible for the part-time enforcement officers to proactively combat or “catch” in the act.

- Even when an illegal dumper is apprehended, many of the cases are seen as “low priority” by the courts; thus, they are dismissed by judges.
- Counties in Ohio do not have the ability to draft ordinances and must therefore rely on the State of Ohio to enact legislation with regard to the prosecution of illegal dumpers.

Gwinnet County, Georgia

- Gwinnet County has recently consolidated what was previously a disorganized and ineffective environmental enforcement program. Currently the program has two environmental enforcement officers covering a 422 square mile area.
- The rapid growth and expansion in Atlanta has resulted in severe construction and demolition dumping on the county’s public property and right-of-ways. The problem has been magnified since the county does not have a C&D disposal facility.
- All solid waste services within the county are privatized. The private operators pay a regulatory fee to the county to fund the enforcement budget. The fees fund a \$400,000 annual illegal dumping enforcement budget.
- Although C&D illegal dumps have been a problem, the county does not plan on constructing a C&D landfill. Currently private operators drive to one of the five type IV sites in the Atlanta metro area, outside the county. Lack of accessibility to a C&D landfill may continue to yield illegal dumpsites within the county.

Maricopa County, Arizona

- Maricopa County’s environmental enforcement program is split between the County Board of Health and the Arizona Department of Environmental Quality (ADEQ).
- A limited budget of \$60,000 has been established to fund the nation’s fastest growing county⁶⁷ with one enforcement officer and one vehicle.
- Maricopa has over 9,000 square miles of land to patrol.
- Aggressive pursuance of illegal dumpers “caught in the act” has been an impossibility with one officer to cover the entire county; therefore, the enforcement officer is limited to reactive measures. He investigates complaints received by phone. Complaints and numbers of illegal dumpsites have grown and are projected to continue under the current program.

⁶⁷ Based on physical population gain of 489,226 people (1990-1996).

City of Chicago, Illinois

- The City of Chicago uses an administrative hearings process in place of courts to prosecute violators of illegal dumping statutes. The administrative hearings process has greatly reduced the case loads for municipal judges, and resulted in the illegal dumping cases being presented in an administrative hearings process, where the cases receive the appropriate attention. Administrative hearings are funded by the city, but operate with complete autonomy in order to remove any biases.
- An enforcement unit was created within the Department of Environment (DOE) in 1996. The unit is devoted full-time to enforcing against illegal dumping. Investigators respond to citizen complaints, conduct surveillance at high incident sites, and coordinate with the Chicago Police Department in making arrests.
- The city has co-authored a Construction and Demolition Debris handbook with the Environmental Protection Agency. The City of Chicago has historically experienced a large amount of illegal dumping of C&D debris.
- City has established tire bounty days when tires can be disposed of in a legal manner.
- Increasing the cost to dumpers was an important step in improving the city's enforcement program. Fines were increased to between \$1,000 and \$2,000 for first offenses and vehicles of dumpers were impounded at an additional charge of \$2,000.
- City is able to maintain community and governmental involvement by continually broadening the scope of the program and by developing a strong public education component which includes brochures, billboards, bus cards, and an information video, as well as participation in events such as senior citizen picnics, super block meetings and festivals.

Keep Akron Beautiful (Akron, Ohio)

- Program has involvement from all levels of government. The state funded the program, the mayor appointed a policy making board, and the City of Akron service coordinator coordinated all activities with the board. Each level of government has an interest in the success of the program and has an avenue for expressing concerns and interests.
- Program has annual bus tours where judges, prosecutors, and concerned citizens view various illegal dumpsites, and see sites that have been cleaned up and revitalized. In addition, a monthly newsletter is one way in which the program keeps interested parties abreast of current issues with regard to the program.

City of San Diego, California

- Each of the eight enforcement officers is dedicated to a specific geographical area of the city. Each officer becomes familiar with the area they patrol and can identify changes or patterns with regard to illegal dumping.

- The program provides a community cleanup once or twice a month on Saturdays. These cleanups give a community the chance to get rid of large and bulky items. The cleanups rotate, so that every community has a cleanup day about once every three years.
- A new computer system tracks all calls with special codes so that operating data can easily be tracked. A key trend identified through the use of this tracking process is an increase in illegal dumping on public property.

City of Las Vegas/Clark County, Nevada

- Program started in 1994 due to a complaint from a citizen to the Clark County Health District concerning illegal dumping.
- The program is a county operation, but the majority of the activity involves the City of Las Vegas.
- Citizens are highly involved in the illegal dumping program. If a citizen reports an illegal dumper and testifies in the prosecution, then 50% of the fine levied goes to the citizen witness.
- C&D debris is the number one problem, especially concrete. Other commonly found types of debris include yard waste, primarily from commercial landscapers and residential waste.
- A dirt exchange program has helped excavation companies locate people/companies that need fill dirt, thereby reducing some illegal dumping activities.
- The county would like to establish, at some point in the future, an environmental court where only environmental crimes are tried. At present, the prosecutors have not been anxious to prosecute illegal dumpers. As a result, the offenders are oftentimes just told to clean up the illegally dumped materials.
- The program is funded through a \$1.00 surcharge on the sale of tires.

City of Chattanooga, Tennessee

- The City's program has been in existence for 11 years. The original staffing consisted of three inspectors/investigators. Total staff is now at nine inspectors with each inspector responsible for a specific "district" in the city⁶⁸.
- The City of Chattanooga currently has an environmental court. This has greatly expedited prosecution of illegal dumping cases. Environmental cases are heard every Thursday.
- The program has received favorable press. It has recently been the topic of talk radio programs in the City of Chattanooga, and is also getting significant television exposure.

⁶⁸ It is important to note that the inspectors are also responsible for all code enforcement activities within the city (substandard housing, abandoned automobiles, etc.).

- The program is constantly evolving to better meet the needs of the citizens and to prevent illegal dumping. The program is complaint driven. Citizens are educated regarding illegal dumping through brochures, TV ads, talk radio shows and neighborhood organization meetings.
- Inspectors build a relationship with the police by conducting courses on illegal dumping at the police academy. Inspectors have now developed a relationship with the police that assists in having an open line of communication with regard to code enforcement violations (illegal dumping, etc.).
- The City program will soon be computerized to help track its operations.
- The illegal dumping program has developed a neighborhood network through the code enforcement department.

Cook County, Illinois

- The illegal dumping program is managed by the Air Monitoring Department of Cook County.
- Individuals sentenced by county courts to perform community service are used in illegal dumping cleanup efforts.
- The program is successful due to the cooperation of county highway department and HAZMAT (hazardous materials unit). The highway department allows the use of their trucks and HAZMAT personnel are used in the cleanup of sites.
- The program is funded through county taxes.

City of New York, New York

- Each sanitation supervisor for the City of New York can issue a summons to an illegal dumper to appear in court.
- The program has a community board, which helps to promote community involvement and also helps to govern the program. The board is made up of individuals from different boroughs throughout New York City. The board enhances communication about similar problems and promotes involvement by the entire community.
- The community board helps to educate and inform the public about illegal dumping issues.
- The City of New York has dedicated an entire unit of enforcement officers to combat illegal dumping.

Franklin County, Ohio

- The Franklin County illegal dumping program holds investigation workshops for the police department. The program has been extremely successful in educating over 400 different municipal officers.
- The entire \$380,000 budget is funded by the Solid Waste Authority of Central Ohio.
- The program has a community board that is made up of business leaders, citizens, and representatives from the city. The community board helps to decide how to spend money collected from fines for illegal dumping.
- The program has established and maintained a 100% cleanup rate of illegal dumpsites.
- A dedicated legal counsel is assigned to the county's Anti-Dumping Project. This county prosecutor specializes in environmental law.
- Fines assessed on illegal dumpers are used to help fund the Ohio program and pay for road signs and cleanups.

Dade County, Florida

Dade County has significantly reduced its illegal dumping problems by taking a proactive approach. They believe the current program is one of the most progressive in the nation.

- Dade County uses a “three-pronged approach.” This approach consolidates the services of the Metro-Dade Police Department, the Office of the State Attorney, and the Dade Solid Waste Management (DSWM). This cooperative effort allows for the investigation, arrest, and prosecution of persons who commit illegal dumping.
- In addition, a “special master” program has been implemented. These county enforcement personnel are empowered to issue civil citations carrying fines from \$250 to \$1,000.
- The enforcement personnel are supplemented with ten undercover illegal dumping enforcement units. This group is not certified to issue citations, but maintains lines of communication with proper enforcement authorities over police radio channels from common illegal dumpsites (i.e., stakeouts).
- The special master program uses a third party who is not a government employee to render impartial decisions.

Palm Beach County, Florida

In 1989, Palm Beach County had an estimated 740 acres of illegal dumpsites across the 2,300 square mile county. In 1990, the Illegal Dumping Task Force was formed and has been comprised of individuals from the following agencies:

- County Sheriff's Office
- State Attorney's Office

- County Code Enforcement
- County Property Department
- County Public Health Unit
- County Real Estate Management Department
- County Environmental Control Office
- Department of Environmental Protection
- The Solid Waste Authority

The Task Force has been very successful at achieving the program's goals. This is due, in large part, to full commitment and cooperation of all agencies involved.

- Repeat offenders have been given prison sentences.
- Vehicles involved in the act of committing felonies have been confiscated.
- Cleanup and restoration has been required for those prosecuted.
- Civil penalties as well as community service has been imposed.

City of San Antonio, Texas

- The City of San Antonio's program started in 1988 and originally focused on noise pollution. In 1991 illegal dumping was included as an enforcement responsibility. The program is housed within the Code Compliance Department of the city. There are 38 civilian employees to deal with substandard housing, abandoned automobiles, etc. The seven police officers within Code Compliance deal solely with illegal dumping.
- The police officers that are in the field are each assigned a district within the city. Each officer has office space at the police precinct station within his district.
- In the northern part of the city, C&D debris is a problem. Overall, the primary debris dumped illegally is residential trash, sofas, beds, etc. The Senior Abatement Officer did note, however, that the dumping of tires is on the rise, since the State of Texas abolished the state's tire recycling program.
- Educational programs concerning illegal dumping focus primarily on the elementary and middle schools. In the past two years, the city has also begun to conduct more presentations for homeowner's associations.
- The city has a 24-hour complaint line (which is shared with the Code Compliance Department for all code issues). The illegal dumping complaints are then sent via computer to the Senior Abatement Officer, who then assigns the case to the appropriate field officer in one of the City's four districts.

Johnson, Hood, Erath and Somervall Counties, Texas

- An illegal dumping task force was recently created to begin combating illegal dumping in a rural four-county area (Johnson, Hood, Erath and Somervall counties). Johnson and Hood counties are experiencing rapid growth, and as a result are seeing a corresponding increase in illegal dumping.
- The start-up of the program is being funded by a grant from the North Central Texas Council of Governments and the Texas Natural Resource Conservation Commission.
- Of the four counties, some were initially more committed to the program than others. To get the buy-in of all four counties, county commissioners and judges from the more proactive counties helped sell the program to the other counties.
- Each county is responsible for “policing” its own territory. However, monthly meetings of the illegal dumping task force allows all counties to keep informed as to the status of illegal dumping in the other areas, share ideas, etc.
- At this point, with the program one-year-old, the biggest challenge is getting the prosecutors and judges involved and educated with regard to environmental law.

Capital Area Planning Council (CAPCO), Texas

- CAPCO’s solid waste program has recently taken on the role of administering and coordinating the Capital Region Solid Waste Enforcement Task Force. The purpose of this task force is to improve the enforcement of solid waste laws in Central Texas. The task force was created in 1996 through an interlocal agreement with the counties of Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Llano, Lee, Travis and Williamson; the City of Austin; and the Lower Colorado River Authority.
- Within Travis County there is an environmental county attorney who specializes exclusively in environmental crimes.
- Of the ten counties that comprise CAPCO’s region, five have environmental enforcement officers. It should be noted that not all of these officers spend 100% of their time combating illegal dumping. Other responsibilities for these officers includes code enforcement, health and safety, etc.
- CAPCO staff and county officials agree that a coordinated effort and continual emphasis on combating illegal dumping is essential for the success of the program at a county and regional level.

City of Houston, Texas

- The City of Houston established its program to combat illegal dumping in 1992. The program was initially funded with a grant from the Texas Natural Resource Conservation Commission. The program is now funded by the city’s General Fund; however, the city does attempt to obtain grant funds whenever possible.

- The city established the “Rat-on-a-Rat” program to encourage citizens to call in on the city’s 24-hour hotline when they see someone illegally dumping.⁶⁹ Citizens can receive up to \$200 in cash rewards for the successful conviction of an illegal dumper.
- The program is currently staffed with 17 individuals (1 chief inspector, 6 inspectors, 1 supervisor for inspectors, 2 sergeants, 4 police officers, 1 community liaison, and 2 administrative assistants). Everyone concentrates on the illegal dumping of solid waste with the exception of 2 police officers who focus on hazardous waste. Currently, two police officers are fully qualified to handle hazardous materials, but all remaining police are in the process of qualifying and are involved in hazardous cases. It is not the intent of the program to dedicate particular officers to hazardous waste exclusively. All will be fully trained to respond as needed.
- The unit spends 70% of its time on solid waste illegal dumping, which is its primary focus. The remaining 30% of the time is spent on hazardous illegal dumping and water pollution.
- The city also conducts education programs in the community as part of its Neighborhood Environmental Education Training (NEET) project. NEET conducts seminars and activities aimed at discouraging litter and illegal dumping of hazardous materials. Education programs also encourage recycling, pollution prevention, and safe waste handling methods. Low income and minority neighborhoods are targeted.

Harris County, Texas

- Harris County’s Environmental Enforcement Division (EED) was created in May 1993 to respond countywide to the problem of illegal dumping of solid waste in the unincorporated areas of Harris County. It is currently staffed with five (5) certified peace officers commissioned through a centrally located constable’s office.
- The duty of these officers is:
 - To actively work to prevent the illegal dumping of solid and special wastes
 - To bring violators into compliance or justice
 - To educate the public about the hazards of illegal dumping, how to properly dispose of solid waste and household hazardous wastes, and how to report illegal dumping
 - To enforce the State of Texas’s laws pertaining to the illegal disposing of solid waste
- The Division is focused on traditional enforcement. Enforcement is targeted at identifying, categorizing, and properly responding to dumpsites, abandoned barrels, and related environmental concerns. Two officers are HAZWOPER (Hazardous Waste Operations and Emergency Response) certified and the others will also be trained. The officers are on call 24 hours a day and the EED maintains a 24-hour emergency response line for citizens to report violations. Investigators are immediately notified by the computerized system. Officers have the authority to issue citations to a violator or to arrest those participating in the act of illegal dumping. Cases are also referred to the EED by regular patrol deputies in the Harris County Sheriff’s Department and the various Constables’ Precincts.

⁶⁹ The City of Houston spends \$5 million per year cleaning up illegal dumpsites and hauls away approximately 160,000 cubic yards per year of trash from illegal dumpsites.

- The EED's proactive education program includes adult and children's versions of STOP (Stop Trashing Our Precinct) brochures developed in cooperation with a local elementary school, which won first place at the State's Community Problem Solving Competition in 1993. A grant-supported, professionally produced videotape on the dangers and consequences of illegal dumping was also produced.

The estimated annual cost of the program is \$275,000+. This includes salaries, benefits, vehicles, film/processing, uniforms, equipment and printing.

**Table C-1. Contact Information for Highlighted Local Governments
and Other Organizations Highlighted⁷⁰**

Local Government or Organization	State	Contact	Phone Number
Camden County	Missouri	Jim Icenogel	(573) 346-2234
Cameron County	Texas	Leslie De Los Santos	(956) 399-3679
City of Chattanooga	Tennessee	Steve Hargis	(423) 757-5204 Ext. 0545
City of Chicago	Illinois	Carmen Driver	(312) 744-8096
City of Kansas City	Missouri	Kim Reeves	(816) 513-3491
City of Kinloch	Missouri	Sargent Pargo	(314) 521 9999
City of New York	New York	Richard DiPietro	(212) 219-8090
City of San Antonio	Texas	Ruben Castillo	(210) 207-8228
City of San Diego	California	Nancy Lovell	(619) 492-5055
City of Springfield	Missouri	Barbara Lux	(417) 864-2005
City of St. Louis	Missouri	Jeff Towers	(314) 622-4628
Clark County/ Las Vegas	Nevada	Victor Skaar	(702) 383-1274
Cook County	Illinois	Robert LaMorte	(708) 865-6165
Dade County	Florida	Joseph Ruiz	(305) 594-1520
Franklin County	Ohio	Mitzi Kline	(614) 462-3160
Gallia County	Ohio	Bonnie Pierce	(740) 446-1221
Greene County	Missouri	Tim Smith	(417) 868 4015
Gwinnett County	Georgia	Connie Wiggins	(770) 822-5187
Harris County	Texas	Ted Heap	(713) 755-6306
Jackson County	Ohio	Joe Wright	(740) 286-6464
Jefferson County	Missouri	Jerry Brown	(636) 797-5036
Keep Akron Beautiful	Ohio	Paula Davis	(330) 375-2116
Lee County	Florida	Dave Archer	(941) 691-7533
Maricopa County	Arizona	Marc Richardson	(602) 506-3867
Medocino County	California	John Morley	(707) 463-4466
Meigs County	Ohio	James Soulsby	(740) 992-3371
Newton County	Missouri	Gary Roark	(417) 451-4357
Palm Beach County	Florida	Ken Berg	(561) 697-2700
Stone County	Missouri	Tony DeLong	(417) 357-6127
Vinton County	Ohio	Angie Mitchell	(614) 596-5242
Wake County	North Carolina	Wayne Woodliet	(919) 856-6196
Wharton County	Texas	Mark Hoffer	(409) 543-1373

⁷⁰ Additional references and contacts specific to the State of New Mexico are included in Appendix F.

APPENDIX D:
ENFORCEMENT AND PROSECUTION
REFERENCE MATERIALS

NEW MEXICO STATUTES RELATED TO ILLEGAL DUMPING

NEW MEXICO SOLID WASTE ACT, NMSA 1978, 74-9-1 et seq.

74-9-3: Definitions

- **“Solid Waste”** means any:
 - Garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities
 - Solid waste does not include:
 - Drilling fluids and produced waters, fly ash, bottom ash, slag waste, flue gas emission control waste, overburden from mining of uranium ore, coal, copper, molybdenum, and other ores and minerals, agricultural waste, including manure and crop residue, cement kiln dust waste, sand and gravel, solid or dissolved material in domestic sewage or solid or dissolved materials in irrigation return flows or industrial discharges that are a point sources under FWPCA 402 or regulated under the Atomic Energy Act, densified-refuse-derived fuel, material regulated under Subtitle C of RCRA, substances regulated under TSCA, and low-level radioactive waste
- **“Construction and Demolition Debris”** means:
 - Materials generally considered to be not water-soluble and non-hazardous in nature
 - Steel, glass, brick, concrete, asphalt roofing materials, pipe, gypsum wallboard, lumber from construction or demolition of a structure
 - Rocks, soil, tree remains, trees or other vegetative matter from land clearing and land development
 - Construction and demolition debris mixed with any other type of solid waste loses its classification as construction and demolition debris
- **“Yard refuse”** means:
 - Vegetative matter resulting from landscaping, land maintenance, and land clearing operations

74-9-31(A): Prohibited Acts

- No person shall:
 - (1) dispose of any solid waste in a place other than a solid waste facility: (a) having a permit issued under the Solid Waste Act; (b) having a permit for solid waste disposal issued under the Environmental Improvement Act; or (c) otherwise authorized to accept solid waste for disposal or transformation under regulations adopted by the board under the Environmental Improvement Act;
 - (2) dispose of any solid waste in a solid waste facility when a regulation of the board prohibits the disposal of that particular type of solid waste in that facility;
 - • • •
 - (5) dispose of any solid waste in this state in a manner that harms the environment or endangers the public health and safety.

74-9-31(B): Exceptions to Prohibitions

- Section 74-9-31(A) does not prohibit:
 - (1) a person who is a homeowner, residential lessee, or tenant or agricultural enterprise from disposing on the property he owns, rents or leases solid waste generated on that property;
 - (2) a person occupying property from disposing of domestic solid waste generated on the property if the property is located in a place that makes it not feasible to dispose of the solid waste in a permitted solid waste facility and the disposal of the solid waste does not harm the environment or endanger the public health or safety and does not violate any provision of the Solid Waste Act or any regulation adopted under that act; or
 - (3) a person in possession of property from disposing on that property construction and demolition debris or yard refuse generated on that property if the disposition on the solid waste does not violate any provision of the Solid Waste Act or any regulation adopted under that act.

74-9-14: Powers and Duties of the Division

- The Division is responsible for the enforcement and implementation of the regulations adopted by the board pursuant to the Solid Waste Act.

74-9-36: Enforcement; Compliance Orders

- A. Whenever the director determines that any person has violated, is violating or threatens to violate any requirement of the Solid Waste Act, any regulation promulgated pursuant to that act, or any condition of a permit issued under that act, the director may:
- (1) issue a compliance order requiring compliance or assessing a civil penalty, or both; or
 - (2) commence a civil action in district court, including a temporary or permanent injunction.
- B. Any penalty assessed in the order shall not exceed five thousand dollars (\$5,000) per day of noncompliance for each violation.
- C. If a violator fails to take corrective action within the time specified in a compliance order, the director may:
- (1) assess a civil penalty of not more than ten thousand dollars (\$10,000) for each day of continued noncompliance with the order; and
 - (2) suspend or revoke any permit issued to the violator under the Solid Waste Act.

74-9-38: Penalty; Civil

- Any person who violates any provision of Section 31 [74-9-31 NMSA 1978] of the Solid Waste Act or any regulation adopted pursuant to that act may be assessed a civil penalty not to exceed five thousand dollars (\$5,000) for each day of the violation.

74-9-37: Penalty; Criminal

- A. Any person who knowingly violates any paragraph of Subsection A of Section 74-9-31 NMSA 1978:
- (1) if the violation involves a quantity of solid waste that is less than five thousand pounds, is guilty of a misdemeanor; or
 - (2) if the violation involves a quantity of solid waste that is five thousand pounds or greater, is guilty of a fourth degree felony.
- B. Any person who knowingly violates any paragraph of Subsection A of Section 74-9-31 NMSA 1978 and the violation involves any quantity of infectious waste is guilty of a fourth degree felony.
- C. Any person who is convicted of a second or subsequent violation of Section 74-9-31 NMSA 1978 pursuant to the provisions of Paragraph (2) of Subsection A or Subsection B or D of this section is guilty of a third degree felony.

NEW MEXICO TIRE RECYCLING ACT, NMSA 1978, 74-11-1 et seq.

74-11-2: Definitions

- **"Board"** means the environmental improvement board
- **"Department"** means the department of environment
- **"Dispose"** means to deposit scrap tires into or on any land or water
- **"Reprocessing"** means retreading, shredding of scrap tires for crumb rubber used in modified asphalt or concrete paving or shredding for volume reduction for ultimate disposal
- **"Scrap tire"** means a tire that is no longer suitable for its originally intended purpose because of wear, damage or defect
- **"Secretary"** means the secretary of environment
- **"Tire dump"** means an unauthorized location or facility at which scrap tires are disposed
- **"Tire recycling"** means a process in which scrap tires are collected, stored, separated or reprocessed for reuse as a different product or shredded into a form suitable for use in rubberized asphalt or as raw material for the manufacture of other products, but not as a raw material or product used as a fuel for combustion
- **"Tire recycling facility"** means a place operated or maintained for tire recycling, but does not include:
 - (1) retail business premises where tires are sold if no more than five hundred scrap tires are kept on the premises at one time;
 - (2) the premises of a tire retreading business if no more than three thousand scrap tires are kept on the premises at one time;
 - (3) premises where tires are removed from motor vehicles in the ordinary course of business if no more than five hundred scrap tires are kept on the premises at one time;
 - (4) a site where no more than two hundred fifty scrap tires are stored for construction uses for no more than one year;
 - (5) a solid waste facility having a valid permit or registration; or
 - (6) a site where tires are stored and used for agricultural purposes.

74-11-3(B): Prohibited Acts

- No person shall store or dispose of scrap tires in a place other than a tire recycling facility.

74-11-4: Administration of the Act.

- The department is responsible for the administration and enforcement of the provisions of the Tire Recycling Act and of all regulations adopted pursuant that act. The department is delegated all authority necessary and appropriate to carry out its responsibilities.

74-11-10: Enforcement; Compliance Orders

- A. Whenever the secretary determines that any person has violated or is violating any requirement or prohibition of the Tire Recycling Act or any regulation adopted pursuant to that act the secretary may:
- (1) issue a compliance order requiring compliance or assessing a civil penalty, or both;
or
 - (2) commence a civil action in district court, including a temporary or permanent injunction.
- B. A compliance order issued pursuant to Subsection A may include a suspension or revocation of any permit issued by the secretary. Any penalty assessed in the order shall not exceed \$2,500 per day of noncompliance for each violation.

74-11-11(A): Enforcement; field citations

- NMED has a field citation program establishing appropriate minor violations for which field citations, assessing civil penalties not to exceed one thousand dollars (\$1,000) per day of violation, are issued by officers or employees of the department.

Tire Recycling Regulations, NMAC 20.9.2.108: Prohibited Act

- No person shall:
 - C. Dispose of scrap tires in a place other than those places permitted or regulated under the solid waste act
 - D. Discard scrap tires in a place other than a permitted or registered solid waste facility or a permitted tire recycling facility

NEW MEXICO CRIMINAL CODE, NMSA 1978, 30-1-1 et seq.

Article 8: Public Nuisance

30-8-1: Public nuisance

- A public nuisance consists of knowingly creating, performing or maintaining anything affecting any number of citizens without lawful authority which is either:
 - A. injurious to public health, safety, morals or welfare; or
 - B. interferes with the exercise and enjoyment of public rights, including the right to use public property.
- Whoever commits a public nuisance is guilty of a petty misdemeanor.

30-8-4: Littering

- A. Littering consists of discarding refuse:
 - (1) on public property in any manner other than by placing the refuse in a receptacle provided for the purpose by the responsible governmental authorities; or
 - (2) on private property not owned or lawfully occupied or controlled by the person, except with the consent of the owner, lessee or occupant thereof.
- B. Whoever commits littering is guilty of a petty misdemeanor. The use of uniform traffic citations is authorized for the enforcement of this section. The court may require a person who commits littering to pick up and remove from any public place or any private property any litter deposited thereon.
- C. Any jail sentence imposed pursuant to Subsection B of this section may be suspended, in the discretion of the judge, upon conditions that the offender assist in litter clean-up in the jurisdiction for a period not to exceed the length of the suspended sentence.

30-8-5: Enforcement

- The state game commission may designate trained employees of the commission vested with police powers to enforce the provisions of Section 30-8-4 NMSA 1978. In addition, members of the state police, county sheriffs and their deputies, police officers and those employees of the state park and recreation commission [state parks division of the energy, minerals, and natural resources department] vested with police powers shall enforce the provisions of that section.

OTHER NEW MEXICO STATUTES

36-1-18(A): Duties of District Attorney

- Each district attorney shall prosecute for the state in all courts of record of the counties of his district all cases, criminal and civil, in which the state or any county in his district may be a party or may be interested.

29-1-1: Investigation of Criminal Violations; Commencement of Prosecution

- It is hereby declared to be the duty of every sheriff, deputy sheriff, constable and every other peace officer to investigate all violations of the criminal laws of the state which are called to the attention of any such officer or of which he is aware
- It is also declared the duty of every such officer to diligently file a complaint or information, if the circumstances are such to indicate to a reasonably prudent person that such action should be taken
- Failure to perform his duty in any material way shall subject such officer to removal from office and payment of all costs of prosecution.

66-7-364: Putting Injurious Material or Trash on Highway Prohibited

- A. No person shall throw or deposit upon a highway any trash, glass bottles, glass, nails, tacks, wire or cans.
 - B. A person who drops or permits to be dropped or thrown upon any highway any destructive or injurious material or trash shall immediately remove the same or cause it to be removed.
 - C. A person removing a wrecked or damaged vehicle from a highway shall remove any glass or other injurious substance dropped upon the highway from the vehicle.
 - D. As used in this section, "trash" means any article or substance that when discarded creates or contributes to an unsanitary, offensive or unsightly condition. "Trash" includes waste food; paper products; cans, bottles and other containers; household furnishings and equipment; parts or bodies of vehicles and other metallic junk or scrap; and collections of ashes, dirt, yard trimmings and other rubbish.
- Motor Vehicle Division of the Department of Taxation and Revenue exercises authority to enforce the Motor Vehicle Code, including NMSA 66-7-364

APPENDIX E:
NEWS ARTICLES

Listing of News Articles

1. "Illegal Dumping: Another Blight that Spoils Poorer Neighborhoods." *Dallas Morning News*. August 11, 1997.
2. "Environmental Crimes Drawing Increased Heat." *Dallas Morning News*. December 2, 1998.
3. "Pick of Litter." West Palm Beach, Florida. Newspaper and date of publication unknown.
4. "Circuit Prosecutors Help Rural Counties in Fight Against Environmental Crimes." *CHMIA News*. September 1998.
5. "Record Sentence: Operator of Illegal Landfill in Dallas Receives 30-year Prison Term, Fine." *Waste News*. November 9, 1998.
6. "Hillsdale Officials Plan A Bulk Trash Pickup Day To Curb *Illegal Dumping* Cleaning Up Is Too Expensive, They Say." *St. Louis Post-Dispatch*. May 22, 2000.
7. "Mayor Honors Residents Who Report Dumpers." *St. Louis Post-Dispatch*. January 13, 1997.
8. "Police Chief Says Officers Caught 'Dumper' in the Act." *St. Louis Post-Dispatch*. May 25, 1998.
9. "Trash Patrol Efforts to Curb Illegal Dumping Get Results." *The Kansas City Star*. April 2, 2000.
10. "Crime Fighting Unit Attacks Illegal Dumping in St. Louis." *Missouri Municipal Review*. February/March 1997.
11. "Horine Man Released from Jail: County Sells his Possessions Before Cleaning Up Lot." *Meramac Journal*. Date Unknown.
12. "The Trash Trooper." *Rural Missouri*. Date Unknown.

APPENDIX F:

CONTACTS OF AGENCIES IN SPECIFIC AREAS OF THE STATE

STATEWIDE AGENCIES AND ORGANIZATIONS

New Mexico Environment Department

Harold Runnels Building,
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502-2611
<http://www.nmenv.state.nm.us/>

24-hour Emergency Spill Response Hotline: (505) 827-9329

Hazardous Waste Bureau: (505) 428-2500

Air Quality Bureau: (505) 827-1494

Ground Water Quality Bureau: (505) 827-2918

Green Zia Environmental Excellence Program: (505) 827-0677

Solid Waste Bureau

Harold Runnels Building,
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502-2611

Phone: (505) 827-0197

Fax: (505) 827-2902

Compliance Section: (505) 827-2924

Permitting Section: (505) 827-2952

Technical Assistance Section: (505) 827-2860

Recycling Information: (505) 827-2860

Scrap Tires: (505) 827-2865

NMED DISTRICT AND FIELD OFFICES

District I

4131 Montgomery, N.E .
Albuquerque, NM 87109

Phone: (505) 841-9450 Fax: (505) 884-9254

Solid Waste Bureau Compliance officer: Chuck Akeley (505) 841-9469

724 West Animas
Farmington, NM 87401
Phone: (505) 327-9851
Fax: (505) 326-3747

306 South Fifth
Gallup, NM 87301
Phone: (505) 722-4160
Fax: (505) 863-2664

1212 ½ Lob Canyon Road
Grants, NM 87020
Phone: (505) 287-8845
Fax: (505) 287-3415

1000 Main Street
Los Lunas, NM 87031
Phone: (505) 841-5280
Fax: (505) 841-5284

224 Unser Blvd., S.E., Suite E
Rio Rancho, NM 87124
Phone: (505) 892-4483
Fax: (505) 892-4816

214 Neel Avenue, N.W.
Socorro, NM 87801
Phone: (505) 835-1287
Fax: (505) 835-3119

District II

#4 Calle Medico
Santa Fe, NM 87505

Phone: (505) 827-1840 Fax: (505) 827-1839

Solid Waste Bureau Compliance officer: Ernie Guterrez (505) 827-1749

#4 Calle Medico
Santa Fe, NM 87505
Phone: (505) 827-1841
Fax: (505) 827-1839

705 La Joya Street
Española, NM 87532
Phone: (505) 753-7256
Fax: (505) 753-1840

505 National Avenue
Las Vegas, NM 87701
Phone: (505) 425-6764
Fax: (505) 4256604

1243 South Second Street
Raton, NM 87740
Phone: (505) 445-3621
Fax: (505) 445-3376

1215-B Gusdorf
Taos, NM 87571
Phone: (505) 758-8808
Fax: (505) 758-9851

District III

1170 N. Solano Drive, Suite M
Las Cruces, NM 88001

Phone: (505) 524-6300 Fax: (505) 524-3891

Solid Waste Bureau Compliance officer: Harry Mikel (505) 647-7953

411 Tenth Street, Room 106
Alamogordo, NM 88310
Phone: (505) 437-7115
Fax: (505) 434-1813

1302 E. 32nd Street
Silver City, NM 88061
Phone: (505) 388-1934
Fax: (505) 388-3258

8050Cody Road
Deming, NM 88030
Phone: (505) 5467559
Fax: (505) 546-6430

District IV

1914 West Second Street
Roswell, NM 88201

Phone: (505) 624-6046 Fax: (505) 624-2023

Solid Waste Bureau Compliance officer: Fred Bennett (505) 624-6124

406 C. North Guadalupe
Carlsbad, NM 88220
Phone: (505) 885-9023
Fax: (505) 887-9283

100 E. Manaña Blvd., Unit #3
Clovis, NM 88101
Phone: (505) 762-3728
Fax: (505) 769-2527

726 East Michigan, Suite 165
Hobbs, NM 88240
Phone: (505) 393-4302
Fax: (505) 393-0906

1216 E. Mechem, Suite 2
Ruidoso, NM 88345
Phone: (505) 258-3272
Fax: (505) 258-4891

113 West Center Street
Tucumcari, NM 88401
Phone: (505) 461-1671
Fax: (505) 461-1864

State Parks Division of NMEMNRD

1220 S. St. Francis Drive
P.O. Box 1147
Santa Fe, NM 87504-1147

Phone: (505) 476-3355
Fax: (505) 827-1478

For contact information about the 31 New Mexico state parks, go to:
<http://www.emnrd.state.nm.us/>

State Forestry Division of NMEMNRD

1220 S. St. Francis Drive
P.O. Box 1147
Santa Fe, NM 87504-1147

Phone: (505) 476-3326
Fax: (505) 827-3330

For information about the Forestry Division's programs, go to:
<http://www.emnrd.state.nm.us/forestry/index.cfm>

New Mexico State Land Office

310 Old Santa Fe Trail
Santa Fe, NM 87504

Phone: (505) 827-5760
Fax: (505) 827-5766

<http://www.nmstatelands.org/>

New Mexico Department of Game and Fish

P.O. Box 25112 (zip 87504)
One Wildlife Way.
Santa Fe, NM 87507

Phone: (505) 476-8000
Fax: (505) 476-8143

<http://www.gmfsh.state.nm.us>

Attorney General's Office, New Mexico

Water, Environment, and Utilities Division
407 Galisteo Street
Batan Memorial Bldg., Room 20
Santa Fe, NM 87501

Phone: (505) 827-6000
Fax: (505) 827-5826

http://www.ago.state.nm.us/Environmental/environmental_enforcement.html

Department of Public Safety, New Mexico State Police

4491 Cerrillos Road
Post Office Box 1628
Santa Fe, NM 87501

Phone: (505) 827-9000

For a list of District and local offices of the State Police, go to their web site at:
<http://www.dps.nm.org/>

New Mexico Department of Transportation

1120 Cerrillos Road
P.O. Box 1149
Santa Fe, NM 87504-1149

Phone: (505) 827-5100
Fax: (505) 827-5469

For listings of District and local offices of the New Mexico Department of Transportation, go to their web site at: <http://www.nmshtd.state.nm.us/>

New Mexico Department of Tourism, New Mexico Clean and Beautiful

495 Old Santa Fe Trail
Santa Fe, NM 87501

Phone: (505) 827-6346 / (800) 867-7666
Fax: (505) 827-6496

FEDERAL AGENCIES AND ORGANIZATIONS

U.S. Environmental Protection Agency (U.S. EPA) Region VI

1440 Ross Avenue
Suite 1200
Dallas, TX 75202
<http://www.epa.gov/region6>

Phone: (800) 887-6063

Compliance Assurance & Enforcement

Phone: (214) 665-2210

Water Quality Protection

Phone: (214) 665-7101

For a list of resources about solid waste issues, go the following website:

<http://www.epa.gov/epahome/wastepgram.htm>

For information regarding illegal dumping, go to the following web site:

<http://www.epa.gov/region5/dmpguide.htm>

U.S. Department of Agriculture Forest Service

Southwestern Region
333 Broadway, S.E.
Albuquerque, NM 87102

Phone: (505)842-3292

For specific information regarding the 5 National Forests and 2 National Grasslands in New Mexico, go to:

<http://www.fs.fed.us/r3/>

U.S. Department of the Interior Bureau of Land Management

1474 Rodeo Road
Santa Fe, NM 87505

Phone: (505) 438-7400

Fax: (505) 438-7435

<http://www.nm.blm.gov>

U.S. Army Corps of Engineers (Corps)

Albuquerque District Office
4101 Jefferson Plaza NE
Albuquerque, NM 87109-3435

Phone: (505) 342-3283

Fax: (505) 342-3498

<http://www.spa.usace.army.mil/reg/>

For additional information regarding the Corps' regulatory and enforcement responsibilities, go to their web site at <http://www.mvs.usace.army.mil/permits/>