



EPA

Illegal Dumping Prevention Guidebook



CONTENTS

INTRODUCTION	1
NATURE OF THE PROBLEM	1
What is illegal dumping?	1
Who illegally dumps waste?	2

INTRODUCTION

Illegal dumping, also known as “fly dumping,” “midnight dumping,” or “wildcat dumping,” is a major problem in many communities throughout the United States. It raises significant concerns regarding public health and safety, property values, and quality of life. An effective illegal dumping prevention program must be customized to address the factors contributing to the problem in a given community. This guidebook contains general information about illegal dumping and guidance for developing a prevention program. A “toolkit” of practices that have proven effective in combating illegal dumping is included along with case studies detailing successful implementation of these practices.

This guidebook is intended for use by

- State, tribal, county, and local government authorities
- Community groups and civic organizations
- Industry
- Utilities (such as railroads and power companies)

The information presented in this guidebook is based on a study conducted to characterize illegal dumping in urban and rural areas throughout the upper Midwest. The study included tours of neighborhoods and interviews with local government officials, community groups, and industry representatives. In addition, a literature and Internet search was conducted to gather information on successful illegal dumping prevention programs. Over 50 individuals from communities, non-profit organizations, corporations, and government agencies peer-reviewed this guidebook and provided invaluable suggestions for its content. This guidebook can be found on the World Wide Web at <http://www.epa.gov/region5> and will be updated as new information on innovative prevention programs is discovered.

NATURE OF THE PROBLEM

What is illegal dumping?

Illegal dumping is disposal of waste in an unpermitted area. It is also referred to as “open dumping,” “fly dumping,” and “midnight dumping” because materials are often dumped in open areas, from vehicles

- Appliances or “white goods”
- Furniture
- Yard waste
- Household trash
- Medical waste

Wastes such as scrap tires, bulky items, and yard waste may be illegally dumped because they are banned from landfills and their proper management can be costly. Residential and commercial wastes may be illegally dumped in areas that lack or have costly pickup service.



Tires and demolition debris illegally dumped at a vacant industrial site

Sites used for illegal dumping vary but may include abandoned industrial, residential, or commercial buildings; vacant lots on public or private property; and infrequently used alleys or roadways. Because of



Drums of industrial waste at an illegal dump site

An individual may claim to be operating a transfer station or recycling business and accept waste at an unpermitted facility, only to abandon the facility when it reaches capacity. A resident may dump wastes that did not get picked up by local waste haulers, such as bulky items, carpeting, or household hazardous wastes. In many cases, illegal dumpers are breaking other laws relating to vehicle licensing, insurance, drug possession, or theft.



Abandoned, unpermitted recycling facility

Why is illegal dumping a problem?

The **health risks** associated with illegal dumping are significant. Areas used for illegal dumping may be easily accessible to people, especially children, who are vulnerable to the physical (protruding nails or sharp edges) and chemical (harmful fluids or dust) **hazards** posed by wastes. Rodents, insects, and other vermin attracted to dump sites may also pose health risks. Dump sites with scrap tires provide an ideal breeding ground for mosquitoes, which can multiply 100 times faster than normal in the warm, stagnant water standing in scrap tire casings. Severe illnesses, including encephalitis and dengue fever, have been attributed to **disease-carrying mosquitoes** originating from scrap tire piles. In addition, countless neighborhoods have been evacuated and property damage has been significant because of dump sites that caught **fire**, either by **spontaneous combustion** or, more commonly, by **arson**. Illegal dumping can impact proper drainage of runoff, making areas more susceptible to **flooding** when wastes block ravines, creeks, culverts, and drainage basins. In rural areas, open burning at dump sites can cause forest fires and **severe erosion** as fires burn away trees and undergrowth. Dumping activities in



Illegally dumped tires along a creek

Finally, the **costs** to local government and industry associated with continuous clearing of illegally dumped waste materials are significant. Some urban areas have reported spending several million dollars per year on cleanup, hauling, and disposal activities associated with illegal dump sites. These costs may be passed along to residents in the form of higher service fees or property taxes.

What factors contribute to the problem?

Demographics

Communities subject to illegal dumping are typically areas with limited access to convenient, affordable waste disposal facilities or services and recycling programs. In lower-income areas, residents may have difficulty affording trash pickup and disposal fees. These areas may also have gang- or drug-related activities and high crime rates, which often result in illegal dumping being given a low priority by law enforcement officials and prosecutors. The problem tends to be worse in areas with a high population of renters who have less stake in the community or absentee property owners who do not respond to problems. Residents in rural areas, where illegal dumping is a common, long-time practice, may not be aware of applicable laws or understand its harmful impacts.

Physical Characteristics

Unsecured properties, including undeveloped lots, abandoned structures, unused industrial facilities, and remote spaces, are inviting to illegal dumpers. Areas with vacant properties tend to have a higher incidence of illegal dumping because of the reduced potential for dumpers to be sighted. Other areas, including poorly lit access roads, property along railways, highways and alleys, charity drop box locations, and construction sites or public areas with waste containers are prime targets for illegal dumping.

Forest preserves, wooded sites, and farms (especially those near heavily populated areas) are often targets for illegal dumping because they are sparsely populated and dark. The borders of cities and counties tend to have a higher incidence of illegal dumping because of a lack of police presence.



Roofing shingles dumped on a rural road

Illegal dumping occurs near junkyards, active or closed landfills, solid waste transfer stations, and temporary dump areas at construction sites when dumpers want to avoid disposal fees or find that a site is closed or refuses to accept waste. Also, the presence of illegally dumped materials attracts additional dumping.

Natural disasters, particularly flooding, result in damaged appliances, wrecked furniture, and demolition debris that may lead to widespread illegal dumping. EPA's "Planning for Disaster Debris" document (EPA530-K-95-010) is available to help plan for and address these situations.

Lack of Alternative Waste Disposal and Recycling Programs

Areas without routine or affordable pickup service for trash and recyclables tend to experience a higher incidence of household and yard waste dumping. Also, landfills and transfer stations that have high disposal fees, are not conveniently located, have minimum tipping fees, or do not accept small loads encourage dumping. Materials prohibited from landfilling, such as yard waste, scrap tires, freon-containing appliances, and car batteries, may be illegally dumped unless alternate management programs are available, affordable, and well known to the public. EPA's "Decision-Maker's Guide to Solid Waste Management" (EPA530-R-95-023) is available to assist local governments in establishing comprehensive waste management programs.



Illegally dumped tires in and around an abandoned warehouse

Communities lacking a contract with a waste hauler and standardized billing (by which waste removal is integrated into a water or sewer charge) may have problems with residents who refuse to pay a waste hauler for service on their own. EPA's document titled "Solid Waste Contract Negotiation Handbook" (EPA220-B-92-004) provides suggestions for establishing contracts with waste management companies, and a "Pay-as-You-Throw Toolkit" (EPA530-R-96-013) is available for communities considering volume-based disposal programs.

Preliminary research shows that communities with "pay-as-you-throw" or unit-based disposal programs do not experience continuing dumping problems. Although such a community may initially experience increased illegal dumping when new programs are launched, once the public understands the system, the

In some cases, the fines for a dumping offense are less than the costs for proper waste disposal, and offenders consider the fines to be simply a cost of doing business. Furthermore, failure to appropriately regulate waste haulers and disposal operations invites illegal dumping.

DEVELOPING A PREVENTION PROGRAM

Any illegal dumping prevention program must address the contributing factors in the area where it is implemented. However, successful programs are founded on

- Leadership and support by local officials
- Cooperation among authorities, communities, and industry
- An integrated approach
- Publicizing success

Leadership and Support by Local Officials

Local politicians and high-level officials must make prevention programs a priority and support them with adequate funding, access to equipment, and labor resources. In addition, department staff must work with available resources to carry out the program and report accomplishments back to high-level authorities.

Local ordinances and state laws may already exist or can be developed to discourage illegal dumping. However, ordinances and laws are ineffective without a commitment from high-level authorities for enforcement. For example, police officers must have the support of their command, and the police department must have the support of the court system. In addition, if illegal dumping is not viewed as a priority and little action is taken, residents become frustrated and stop contacting police or local officials to report problems. Residents must be encouraged to persist in contacting different local, county, and state agencies until they find an individual who is responsive to their concerns.

Cooperation Among Authorities, Communities, and Industry

Local authorities such as police, health, environment, public works, and sanitation departments must work

An Integrated Approach

An effective illegal dumping prevention approach requires integration of several strategies that complement one another, including:

- Site maintenance and controls
- Community outreach and involvement
- Targeted enforcement
- Program measurement

Integration of these strategies and cooperation of partners from government, communities, and industry are needed to plan, implement, and sustain a successful prevention program. Each of these strategies is described in detail in the “toolkit” at the end of this guidebook along with case studies demonstrating their successful implementation.

Publicizing Success

Publicizing program results is necessary to obtain continued support from high-level authorities and to maintain cooperation between authorities and community groups. Prevention programs must be recognized as cooperative efforts, and successes need to be shared with all parties involved to validate their participation, gain additional support, and allow others to benefit from lessons learned.

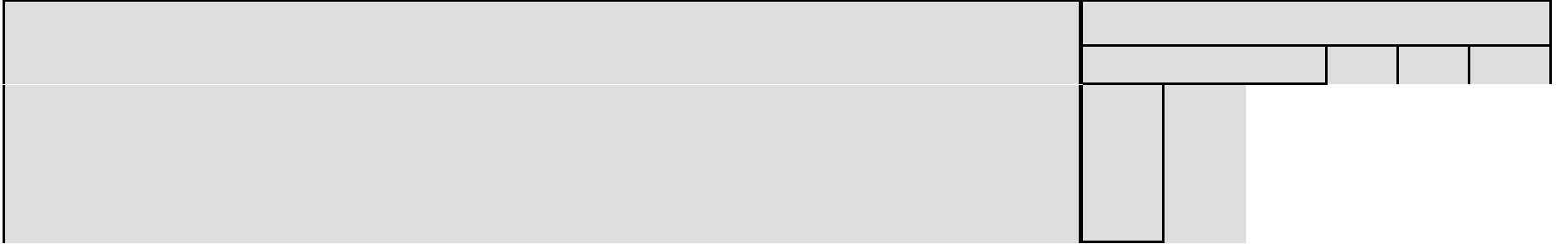
Tracking program impacts such as arrests, fines, vehicle impoundments, cleaned-up sites, and avoided costs is integral to the continuation of illegal dumping prevention efforts. Evaluating program efforts provides data for cost-benefit analyses, publicity efforts, budget hearings, and grant program accountability.

AVAILABLE RESOURCES

Specific resources needed for illegal dumping prevention programs include

- **Funding** from grants, private donations, operating budgets, special appropriations, and fees assessed on waste management operations
- **Services** such as landfilling, shredding, hauling, and training
- **Equipment** such as cameras, radios, vehicles, and heavy machinery
- **Supplies** such as dumpsters, bags, and tools as well as educational and training materials
- **Human Resources**, including personnel to conduct cleanup, enforcement, surveillance, inspection, and outreach activities



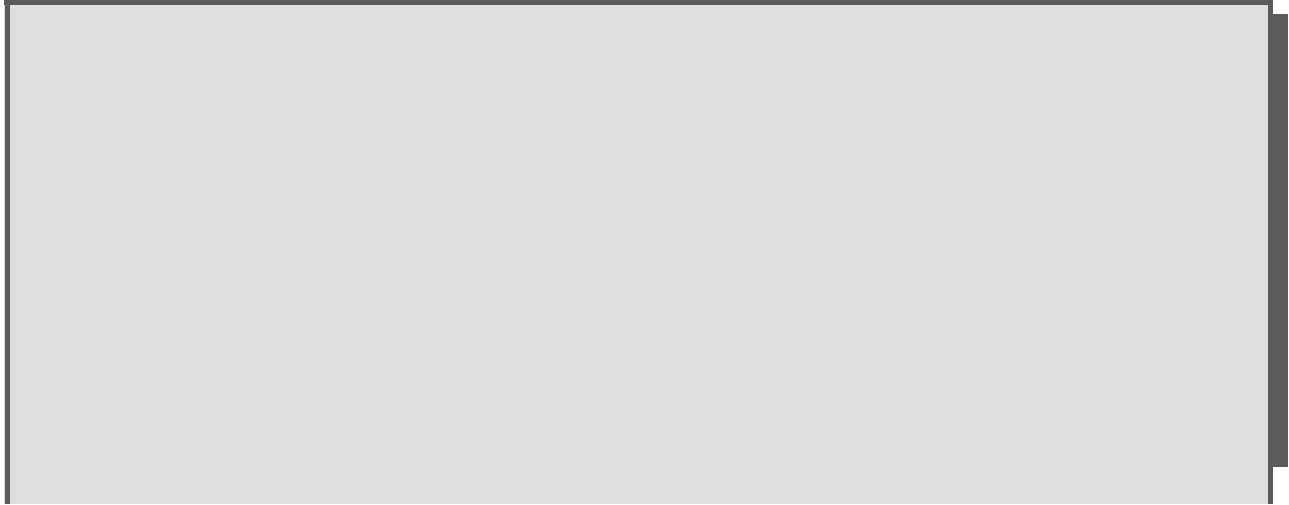


USING THE TOOLKIT

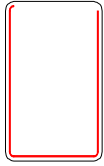
An effective illegal dumping prevention program involves local government, industry, and community stakeholders working together to address the problem in a defined area. The following steps have proven successful for establishing and implementing a customized prevention program:

1. Identify and assemble stakeholders to establish interest in working together
2. Define the boundaries of a specific target area
3. Conduct a thorough assessment of the problem (see page 11)
4. Clearly define goals
5. Select program components from the “toolkit” to develop an integrated program
6. Develop a written description of the overall program design, existing resources, and needs
7. Use the written description to seek resources
8. Assign specific responsibilities and delegate roles
9. Monitor program implementation and evaluate program impacts
10. Publicize qualitative and quantitative impacts of the program

An integrated approach can be effective if the appropriate tools are used. The second part of this guidebook contains a “toolkit” that outlines and describes practices that have proven to be effective in combating illegal dumping. Case studies are provided that describe successful applications of the practices and identify contacts for further information. In addition, the “toolkit” identifies specific resources that can be used to support local implementation of an illegal dumping prevention program.



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CLEANUP EFFORTS

Cleanup projects require a coordinated planning, resource acquisition, and implementation effort. Necessary resources include labor, equipment, and funding. Labor resources can be sought from community and youth groups, local government organizations, corporations, or state or county corrections programs. Equipment such as containers, rakes, bags, gloves, shovels, heavy equipment, and trucks can be provided by public works or highway agencies and private companies. Funding for waste disposal may be provided by government agencies or through corporate donations. In some cases, removed materials such as brick and concrete can be used in a local fill project, thus reducing disposal costs.

Local industry and community groups can assist in landscaping and improving the physical appearance of areas. Such beautification efforts can ward off potential dumpers.

Sites must be cleaned up before a threat to public health and safety develops. State and federal cleanup programs, such as Superfund, may support urgent projects where a defined health or environmental threat exists.

A plan must be developed to remove any dumped materials and keep sites clean. Such a plan should be developed before a cleanup to ensure that the effort is not wasted.

CASE STUDIES

- **East St. Louis, Illinois.** New Spirit, an organization representing over 30 neighborhoods, coordinates Community Cleanup Days. The events have resulted in removal of over 166,000 tons of waste from inner city areas. New Spirit obtained 550 dumpsters from a local waste management company as part of a supplemental environmental project mandated by EPA.

In addition, New Spirit uses volunteers from neighborhood organizations for trash pickups and tire sweeps. *Contact New Spirit, (618) 874-0312.*

- **Barberton, Ohio.** The city health department presented certified cleanup orders to owners of an illegal dump site. 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 clean up 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.*



Drums discovered and secured during cleanup activities

CLEANUP EFFORTS

- **Pennsylvania.** Pennsylvania CleanWays is a nonprofit organization that helps communities clean up illegal dump sites in rural areas. As a condition to providing assistance, before a cleanup 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
- **Detroit, Michigan.** The city, the Michigan Department of Environmental Quality, and EPA targeted an abandoned factory being used for illegal dumping for cleanup and demolition. The 11-acre site had 21 buildings and was the site of several tire fires. Over 100,000 tires, 180 drums, and 30 truckloads of trash were removed from the site before demolition of the



A former dump site that has been cleaned up and remains clean

KEEPING SITES CLEAN

Many illegal dumping areas continue to experience problems after being cleaned up. Signs, lighting, and barriers can reduce or eliminate continued dumping in a given area. In addition, a plan needs to be in place to maintain the area and to promptly remove any materials that are dumped.

Cleaned-up sites can be converted to clean areas that no longer attract illegal dumping. Residents benefit from the availability of attractive space and improved property values.

Signs

Some residents may be unaware that dumping is illegal and punishable by fines or prosecution. Use of “No Dumping” signs can be effective in preventing dumping and creating awareness of ordinances. Signs placed in a high-incidence area can specify fines and penalties or indicate that the area is under surveillance. The area around such signs must be kept clear of debris.



Sign prohibiting illegal dumping under a city ordinance

Lighting

Lighting can be an effective preventive measure in poorly lit or remote areas that experience “midnight dumping.” Lighting increases the visibility of the crime and the chances of the offender’s being caught. Installing lighting requires an investment in electrical service and equipment.

Barriers

Barriers that limit access are critical for reducing and eliminating dumping in areas with a single point of entry. Fences, posts, berms, and concrete highway dividers prevent vehicle access. However, such barriers must not limit legal or emergency access to residences or buildings. In some cases, offenders may continue to dump at or over barriers instead of inside the restricted area.



Concrete barriers preventing access along railroad right-of-way

Landscaping and Beautification

Landscaping and beautification efforts range from simply cutting grass and pulling weeds to establishing parks with benches, walkways, trees, picnic tables, grills, or

KEEPING SITES CLEAN

playgrounds. Other efforts include painting murals, establishing gardens and flowerbeds, or converting sites into natural areas. Local schools and university cooperative extension services can assist at urban gardening sites or in projects involving establishment of plants requiring little or no maintenance. Communities where residents have limited access to public areas are ideal for such projects.

Case Studies

- **Chicago, Illinois.** The city conducts a program in which vacant lots are secured to prevent additional dumping. Vertical, steel I-beams protruding a few feet above the ground have proven to be the most effective barrier at over 500 locations. The city places “No Dumping” signs that also clearly identify the penalties for dumping. The signs have been effective in creating an awareness that illegal dumping is not tolerated. *Contact Alexandra Holt, Department of Environment, (312) 744-3172.*
- **Boston, Massachusetts.** Boston’s beautification initiatives focus on arranging partnerships, maintenance agreements, and adoption of space resulting in cleanups, paintings, and plantings. The Youth Clean-Up Corps Red Shirts program sent over 2,300 youths into neighborhoods for 38 days, resulting in cleanup of 3,722 sites and removal of 136,709 bags of trash weighing over 850 tons. The Broom to Bloom initiative involves distribution of planters and hanging flower baskets along selected roadways. *Contact the Environmental Services Cabinet, (617) 635-3425.*
- **Los Angeles, California.** The Nuisance Alley Conversion Project is a joint venture between neighborhoods, the City Council, and the Department of Public Works. The project involves fencing off “nuisance alleys and signing them over to residents for use as parks. Over 13 alley conversions have taken place at an average cost of \$12,000 each. *Contact the Environmental Hotline, (626) 458-3561.*
- **Whiting, Indiana.** The Amoco Corporation cleaned up a 10-acre property located between residences and a tank farm. Beyond reintroducing native grasses, building bird boxes, eliminating invasive plant species, and clearing pathways for trails, the Wildlife Enhancement Council provided guidance on using community outreach and involvement to sustain the effort. The “Lost Marsh” is now home to 23 bird and 59 plant species. Roadways bordering the tank farm were beautified by planting flowerbeds, lawns, and trees. The project generated a renewed sense of environmental stewardship and community pride, and it reawakened various stakeholders to the value of small parcels of underdeveloped land. *Contact Kevin Sprague, Amoco Corporation, (219) 473-3148.*



Signs posted in Amoco Corporation's Lost Marsh area



COMMUNITY PROGRAMS

Community programs established to organize special waste cleanup events and support community-oriented policing have proven effective in addressing illegal dumping problems.

The focus of any community involvement effort should be to teach residents what can be done to prevent illegal dumping, how and why they should get involved, and who to contact for assistance or to report an incident. In some areas, organized community groups serve as the main catalyst for information exchange and involvement among residents.

Community Events

Organized events to collect and properly dispose of illegally dumped materials, such as tire collections, "Clean Sweeps," and cleanup days, often involve resources provided by government or industry and the efforts of local residents.

Case Studies

- **Phoenix, Arizona.** The city established an illegal dumping prevention program in 1990 that involves public education, citizen involvement, dedicated local prosecution, convenient waste drop-off sites, and free disposal for small residential waste loads. Project HALT (Help Attack Littering and Trashing) uses citizen volunteers to monitor high-frequency dumping areas and aid in reporting and prosecuting illegal dumpers. In 1996 and 1997, the program cleaned up over 15,000 tons of waste, and officers issued over 165 citations. *Contact Juan Martin, Public Works Department, (602) 256-5600.*
- **Tupelo, Mississippi.** Upon request, the city will drop off a truck for use over a weekend by residents to dispose of wastes generated during home improvements or community cleanup projects. Although this program does not allow for disposal of tires or industrial and household hazardous wastes, the city sponsors separate events for those materials. The city covers the cost of waste transportation and disposal. *Contact Boyd Yarbrough, Department of Public Works, (601) 841-6435.*
- **Clifton, New Jersey.** The city's Clean Communities Program consists of events and programs intended to clean up and maintain areas subject to dumping or littering. The program is funded by a state grant program that receives money from a tax on businesses that sell 15 types of products that often end up as litter. Over 150 businesses; all the city's schools; and civic, youth, and neighborhood organizations contribute to the program. Clifton's program has had a significant, visible impact on the cleanliness of city streets, parks, and neighborhoods. In 1991 and 1992, the amount of litter collected decreased from 422 to 358 tons, and over 3,000 miles of streets and 175 acres of parkland were cleaned up. *Contact Alfred DuBois, Department of Public Works, (973) 470-2239.*
- **Detroit, Michigan.** The "Tire Roundup" sponsored by the Southwest Detroit Environmental Visions (SDEV) community organization encourages local residents to get involved in cleaning up scrap tire piles. Using a grant from Wayne County, SDEV pays local residents to bring illegally dumped tires to designated drop-off locations. In 1995, SDEV offered 25 cents per tire, and over 8,000 tires were collected. A waste hauler transported tires from drop-off locations to a tire shredder that processed the tires at no charge. A local bank donates \$3,000 to cover the cost of disposal. *Contact Kathy Milberg, SDEV, (313) 842-1961.*

Community-Oriented Policing

Community-oriented policing involves joint efforts of residents and police to identify, analyze, and develop solutions to crime-related problems, including illegal dumping. Although the implementation strategy depends on conditions within local law enforcement agencies and the community, the following core components are common:

- Open communication and cooperation
- Receptiveness to change
- Commitment
- Trust



COMMUNITY PROGRAMS

Effective community-oriented policing requires officers to (1) communicate how residents can assist in crime prevention and (2) develop cooperative relationships with residents. Police can create such interaction by holding “beat meetings,” speaking to neighborhood groups, participating in business and civic events, and conducting educational programs for school children. Residents in turn voice their concerns about neighborhood crime. They also assist police

policing, strengthen penalties, wage a public relations campaign to market properties subject to dumping, and establish drop-off sites for bulk waste items. As a result, the city provides “Sparkle Wagons” to residents free of charge to haul loads of waste to a landfill. Several other recommendations were implemented by the City Council, including forming a special team of nine officers to attend neighborhood me



Promotional materials for community policing program



EFFECTIVE OUTREACH AND EDUCATION

Many argue that the most important component of a successful illegal dumping prevention program is public education. However, outreach and education programs are only effective when the behavior of a target audience changes or is sustained. In this regard, designing and implementing effective outreach and education programs for illegal dumping prevention are similar to marketing campaigns for consumer products or services.

Target Audience

Identification of a target audience that needs to change or sustain its behavior is the first step. It is important to begin by designing an approach tailored to the specific characteristics of the target audience. An audience assessment can determine which information media are appropriate and the best ways to explain concepts as well as the need for multilingual information. Involving members of the target audience greatly assists in development of outreach materials.

Assessment

A clear, simple message to which the target audience can relate must be developed. The message can be as simple as "No Dumping," "Nail A Dumper," or "Keep It Clean." The message can then be supported with information convincing the audience to comply, including

- Listing fines and penalties
- Indicating that areas are under surveillance
- Showing photographs of dump sites
- Quantifying the costs of cleaning up sites and the resulting impacts on local taxes
- Listing proper disposal sites and practices.

Communication

Use of various methods to disseminate information will ensure that the message is received by the target audience. Media that can be used include newspapers, magazines, flyers, billboards, posters, television, radio, the Internet, wallet cards, and refrigerator magnets. An integrated approach involving different media can maximize the impact of the message.

Continuous Improvement

Soliciting feedback on outreach and education efforts assists in



EFFECTIVE OUTREACH AND EDUCATION

In addition, inexpensive labor to develop and conduct community outreach efforts can be found at local universities. The Environmental Careers Organization and the Americorps program provide low-cost student interns involved in environmental studies for projects.

The Environmental Careers Organization
179 South Street
Boston, MA 02111
(617) 426-4375
<http://www.eco.org>

Americorps/VISTA Program
Corporation for National Service
1201 New York Avenue, N.W.
Washington, DC 20525
(800) 942-2677
<http://www.cns.gov>

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- **Philadelphia, Pennsylvania.** Phillapride uses a multimedia approach to publicize illegal dumping prevention and enforcement activities. A booklet titled "Organizing Your Community Against Illegal Dumping" that outlines methods for building teams to combat illegal dumping was developed and distributed. Television and radio spots are used to announce ways for local residents to prevent and report dumping, such as calling a 24-hour hotline. In addition, information specifically targeting children is published, including an educational comic book series for schools called "The Untrashables." *Contact Mark Vigiano, Phillapride, (215) 575-2210.*
- **North-Central Texas.** The Council of Governments established a comprehensive awareness campaign under a grant from the Texas Natural Resource Conservation Commission. A toll-free, 24-hour hotline is used to forward citizen complaints to local law enforcement officials for response. Complaints can also be submitted electronically via the Internet. The program's slogan is "If You See It, Report It," and the program has several educational aspects, including law enforcement training and a "Top Ten Most Least Wanted" list of illegal dump sites. *Contact Heather Lauden, Council of Governments, (817) 695-9239.*
- **Akron, Ohio.** Keep Akron Beautiful solicits the involvement and support of local industry for illegal dumping prevention and awareness programs. Members of the "Clean Team" visit businesses to distribute anti-littering information and educational materials. In addition, "Seals of Approval" are presented to businesses that demonstrate exemplary environmental stewardship. The program encourages individual resident involvement in littering prevention. *Contact Paula Davis, Keep Akron Beautiful, Inc., (330) 375-2116.*
- **Franklin County, Ohio.** The Solid Waste Authority of



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The “backbone” of effective enforcement consists of ordinances that regulate waste management and prohibit illegal dumping.

prosecuted. Ordinances require the following to be effective:

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Effective Ordinance Components

- ❖ *Definition of key terms*
- ❖ *Authority for inspections and enforcement*
- ❖ *Authority for vehicle impoundment*
- ❖ *Permitting and application requirements*
- ❖ *Permit renewal, transfer, and revocation provisions*
- ❖ *Collection and hauling requirements*
- ❖ *Storage and processing requirements*
- ❖ *Fee collection*
- ❖ *Prohibited activities and violations*
- ❖ *Litter prevention*
- ❖ *Owner responsibilities*
- ❖ *Penalty clauses*
- ❖ *Liability clauses*
- ❖ *Severability clauses*
- ❖ *Prosecution procedures*
- ❖ *Authority for emergency abatement activities*
- ❖ *Cost recovery*



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- **New York, New York.** The city defines illegal dumping as the action of “any person, their agent, employee, or any person under their control to suffer or permit any dirt, sand, gravel, clay, stone, rocks, rubbish, building rubbish, sawdust, shavings or trade or household waste, refuse, ashes, manure, garbage, rubbish or debris of any sort, or any other organic or nonorganic material, or other offensive matter being transported in a dump truck or other vehicle to be dumped, deposited or otherwise disposed of in or upon any street, lot, park, public place or other area whether publicly or privately owned.” Vehicle owners or drivers are liable, and fines range from \$600 to \$1,500. *Section 16-119, Administrative Code, City of New York.*
- **Chicago, Illinois.** City penalties for dumping without a permit can include fines up to \$2,000; 6 months in jail; and up to 200 hours of community service. Violators are liable for up to three times the cost of cleaning up a site, and city contracts can be terminated. Vehicles are subject to seizure and impoundment, with the owner of record liable for a \$500 fine in addition to towing and storage fees. Finally, owners or occupants of any unimproved parcel of real estate must remove any abandoned or derelict motor vehicle, garbage, debris, refuse, litter, or miscellaneous waste. Violations can result in fines of \$200 to \$1,000 per day. *Ordinances 7-28-440 and 7-28-450, Municipal Code, City of Chicago.*
- **Hammond, Indiana.** Permits and fees are required for inspection of waste-hauling vehicles. A \$250 per vehicle fee is required for vehicles, including pickup trucks, that haul waste. Permits are not required for any federally, state, county, or municipally owned and operated waste-hauling vehicles. At the time of payment for the permit, a numbered sticker is issued that must be attached to the regulated waste-hauling vehicle in a conspicuous location. *Article 94.41, Administrative Code, City of Hammond.*
- **State of Michigan.** The Natural Resources and Environmental Protection Act regulates transportation, storage, and disposal of scrap tires. Tire retailers must maintain records indicating the number of scrap tires removed and their final destination. Haulers must maintain records of each load of scrap tires transported on an approved manifest form. A copy of the form must be provided to the person contracting for removal of scrap tires and the registered collection site or licensed landfill where the tires are delivered. Haulers and collection site owners must display registration numbers and renew their registrations annually. The state partners with local law enforcement to enforce the provisions of the act. *Public Act 451, Part 169.*







Training

Law enforcement officers assigned to illegal dumping prevention must have knowledge of applicable laws and ordinances to be effective in the field. Training materials can include “pocket” or “short charge” cards outlining relevant ordinances, sample tickets, or training bulletins and manuals. Short videotapes can be played at roll call, or environmental issues can be integrated into academy training programs.

Several organizations provide training program development assistance:

EPA - National Enforcement Training Institute
(800) 372-6384 or <http://www.epa.gov/oeca/eti>

Midwest Environmental Enforcement Association
Training Programs Coordinator, (847) 742-1249

Southern Environmental Enforcement Network
Training Coordinator, (334) 242-7369

Northeast Environmental Enforcement Project
Training Program Manager, (609) 292-0987

Western States Project
Training Services Coordinator, (602) 542-8514

Case Studies

- **Northern Illinois.** The Illinois Environmental Crimes Investigators Network was established by the state Attorney General's Office. The network offers basic awareness seminars that simplify key provisions in environmental crime statutes, teach basic investigative techniques, and demonstrate how available state resources can be assessed. Instructors from several different organizations participate, including the EPA, state Attorney General's Office, Illinois EPA, state police, and Cook County State's Attorney's Office. In



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TRACKING AND EVALUATION

Tracking and evaluation methods should be used to measure the impact of illegal dumping prevention efforts and determine whether goals are being met. Baseline figures must be established for indicators such as annual cleanup costs, facility compliance, arrests, convictions, fine collection, complaints, and numbers of problem sites.

Tracking

Electronic mapping systems use computerized maps and overlays. A map of a particular area is used as a base, and overlays are created for each type of information being tracked. Such information can include common dumping locations, facilities, inspection or violation histories, surveillance reports, or police districts. Individual program elements can be independently observed or viewed together so that relationships and trends can be identified. For example, by viewing the locations of problem areas together with the locations of permitted facilities, a connection may be identified. In addition, a particular dump site can be immediately referenced to determine the date of the last inspection and whether a citation was written.

Several mapping techniques can be used to electronically map illegal dumping information. Geographic information systems (GIS) such as ArcView[®] and Landview[®], and public domain mapping programs such as Citimap and TIGER[®]

efforts. Court records can be evaluated to determine the typical disposition of cases, which may lead to a different approach in dealing with offenders. Finally, periodic meetings of field personnel to discuss observations and trends can lead to continuous program improvement.



TRACKING AND EVALUATION

- **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 residents and government officials. *Contact New Spirit, (618) 874-0312.*



Community map identifying illegal dumping areas and structures that are vacant or should be demolished



Legend for community map identifying illegal dumping areas

- **Detroit, Michigan.** Illegal dumping data from police files and court records was evaluated. Arrest records revealed that 72 percent of the dumping arrests occurred between 5:00 p.m. and 12:00 midnight, 57 percent of the dumping arrests took place on Tuesdays and Wednesdays, 66 percent of the vehicles used were pickup trucks, and 90 percent of the offenders resided within the city. The data was used to make adjustments in surveillance schedules and tactics. Court records revealed that 62 percent of offenders did not pay fines imposed and were issued lien warrants. *Contact Gregory Moore, Environmental Affairs Department, (313) 237-3095.*



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