

D-5	Discharges: Finding	
	HOTLINES AND CITIZEN REPORTING	

Description

A hotline is a dedicated phone line where citizens can report a variety of environmental incidents, including spills, dumping, or suspicious discharges. It represents the best and sometimes only opportunity to capture transitory discharges, such as dumping to the storm drain system. In addition, an effective hotline can improve response time to major events, such as large-scale spills or high volume sanitary sewer overflows (SSOs). Although setting up a hotline seems fairly simple at first glance, a significant amount of effort is needed to effectively manage it, starting from its initial setup through responding to and tracking incident reports. For more detail about the process of setting up and managing a hotline, consult Brown *et al.*, 2004. The basic steps are also provided in Table 1.

Table 1: Pollution Control Hotline Management Process (CWP, 2004)

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| Step 1. Define the scope
Step 2. Create a tracking and reporting system
Step 3. Train personnel
Step 4. Advertise the hotline
Step 5. Respond to complaints
Step 6. Track incidents |
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Application

Target Discharges

A hotline can help managers detect sewage discharges and illicit discharges to the storm drain system. Its greatest utility, however, is to capture transitory and obviously visible events. Examples include dumping to the storm drain system, sanitary sewer overflows (e.g., broken and flowing manholes), major illicit discharges observed at the stream (e.g., fish kills or sewage flowing from an outfall), and hazardous material or oil spills.

Hotline Design and Coordination

A key design feature and training element of the hotline is ensuring that the correct staff respond to the call. While some communities use multiple hotlines each targeted to a specific set of problems, others use a general central hotline that then contacts the appropriate response team. Regardless of the specific design of the hotline, the operators as well as other “cross-trained” staff should be aware of the appropriate contacts for the specific type of discharge. (See Fact Sheet D-9, Municipal Spill Management, for a summary of typical response teams).

Response Time

Responding to complaints in a timely manner is important for several reasons. First, some discharges, such as hazardous waste spills, create an immediate health risk. Second, many discharges are either intermittent or transitory, and the source cannot be detected without a very rapid response. Finally, even if a community cannot commit to an immediate response time, some target time should be outlined as a program goal.

For many communities, it is not feasible to respond to all complaints within a 24-hour time frame, particularly if they are called in outside of regular business hours. This 24-hour response is typically limited to immediately dangerous and hazardous spills; these spills are typically referred to the fire department (911) or a specific 24-hour spill hotline.

Tracking System

The hotline should be accompanied by a database or other tracking system that tracks where, when, and what type of complaints were received by the hotline, as well as the time and nature of response to each complaint, and who responded to it. These data can be invaluable in modifying and customizing an illicit discharge program. First, if the database indicates clusters of dumping activity, educational efforts can be targeted in these areas. Similarly, stream reaches with frequent reports of discharges to the stream can be priority areas for the ORI (Fact Sheet D-1) or outfall monitoring (Fact Sheet D-2).

Another value of developing a detailed tracking system is to measure program effectiveness in responding to complaints. For example, the database can tabulate typical response times, along with the type of discharge, and the agency or group contacted to respond. A simple analysis of the data can quickly highlight weaknesses in program staffing, or in coordination between agencies.

Implementation Considerations

Staffing and Training

In addition to knowing which agencies to contact, staff also need to be able to identify the type of discharge, based on the information provided by a caller or, in the case of field staff, the observations made in the field (Table 2). Hotline questions should be tailored to draw out these observations from callers. While these staff cannot reasonably be expected to identify the source area, some key tips can help identify the appropriate contacts, which can dramatically improve the response time. It is also helpful to provide in-field training to hotline operators to help them develop skills to recognize both the severity and probable source of a discharge based on descriptions given to them in hotline calls.

Typical Call-in Indicators	Likely Source/ Situation
Sewage smell, or floatables from storm drain outfall during dry weather flow	Storm and sanitary sewer cross-connection
Small (<6" diameter) pipe directly discharging to receiving water	Straight pipe discharge from home or business
Greatly discolored or unnatural smelling liquid (often hydrocarbons) flowing from or pooling on property or from outfall below property	Dumping
Sewage smell; extra green vegetation; saturated ground	Failing Septic System
Muddy water; sediment deposits, up stream construction site	Poor ESC

Costs

Typical costs to set up and operate a pollution hotline are presented in Table 3.

Table 3: Cost to Creating and Maintaining Successful IDDE Hotline			
Steps	Key Elements/ Consideration	Initial Costs	Annual Costs
1. Define the scope	Planning Costs: 60 hrs @ \$25/hr to coordinate with other departments and design program basics	\$1,500	\$0
2. Create a tracking and reporting system	<i>Initial</i> web design: 80hrs @ \$25/hr <i>Annual</i> web hosting @ 200/yr ¹	\$2,000	\$200
	800 toll free number set-up: free Monthly costs: \$20/month (\$240/yr) + \$0.20 per minute (assume average call of 10 minutes and 1,000 calls/yr, or \$2,000/yr) ²	\$0	\$2,240
	Database design: 20 hrs @ \$25/hr ¹	\$500	\$0
3. Train personnel	<i>Initial</i> : 3 days (Approx \$25/hr) including full day introductory Access training course (\$400) = \$1,000 ³ <i>Annual</i> : approx 1/2 day refresher = \$200	\$1,000	\$200
	<i>Initial</i> : presentation prep (24 hrs @ \$50/hr) <i>Annual</i> : mini-refresher training (16 hrs @ \$25/hr to rotate through other departments)	\$1,200	\$800
4. Advertise	<i>Initial</i> : Design brochure and magnets (\$1,000) ⁴ Design 30 second PSA video spot (\$500) ⁵ <i>Annual</i> : 4,000 magnets (\$920) for, 10,000 brochures printed and mailed (\$1,500) + 20 hrs or coordination (\$500)	\$1,500	\$2,920
5. Respond to complaints	Assumes 1,000 calls per year at 10 min per complaint ⁶ to handle including receiving the call, forwarding to appropriate place, logging into a database, and tracking investigation. This time represents approximately 15% of a full time position	\$0	\$5,000
6. Track incidents			
TOTAL		\$7,700	\$11,360
Ways to reduce cost: Use in-house or donated database, brochure and web design services; combine with other pollution prevention hotlines (e.g., storm water); combine with other local, regional or state IDDE hotline programs; use existing web page hosting services; hire staff with database experience			
Notes: ¹ Personal communication with Center for Watershed Protection staff performing similar duties ² Sprint Small Business website ³ ExecuTrain - computer training business ⁴ CWP, 1998 ⁵ CSG, 1998 ⁶ adapted from TCEQ, 2003			

References

Brown, E., D. Caraco, and R. Pitt. 2004. *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*. Center for Watershed Protection. Ellicott City, MD

Center for Watershed Protection (CWP). 1998. *Rapid Watershed Planning Handbook – A Comprehensive Guide for Managing Urbanizing Watersheds*. Ellicott City, MD.

Council of State Governments (CSG). *Getting in Step: A Guide to Effective Outreach in Your Watershed*.

Sprint Small Business web site (www.sprintbiz.com). Accessed May 14, 2003.

Texas Commission of Environmental Quality (TCEQ) Personal Communication. May 9, 2003. Email Jim Reed.

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