

Phase II Stormwater – The Six Minimum Control Measures

Previously, we talked a little about the need for the Phase II stormwater effort, as well as the regulatory background that has launched this phase of the Clean Water Act. Now we get to the overall structure of this new NPDES program. Simply put, there are six major elements that each new Phase II stormwater permit will have to address. The six elements are:

- Public Education and Outreach
- Public Participation/Involvement
- Pollution Prevention/Good Housekeeping
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control

Some of these elements are closely related to one another – for example, activities involving the public education and outreach goal might overlap into the public participation and involvement goal. An example of this would be a stream cleanup day – the public could be educated, then invited to participate in trash pickup along the stream banks. Construction site runoff control and post-construction runoff control also have closely related activities.

Let's now take a close look at each of the minimum control measures and some suggested activities associated with them.

MEASURE 1 - PUBLIC EDUCATION AND OUTREACH

GOAL OF CONTROL MEASURE: Make presentations to citizen groups, professional organizations, and schools emphasizing the importance of environmental awareness and the strides a stormwater management program can make to provide a safe, clean quality of life and ecology.

MUST:

- Distribute educational materials to the community, or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

RECOMMENDED:

- May use materials provided by others.
- Inform public on how to get involved in storm water program activities.
- Tailor program to target specific groups of entities, particularly those likely to have significant storm water impacts.
- Address the viewpoints and concerns of minority and disadvantaged communities.
- Develop and distribute brochures on proper septic system maintenance
- Target specific groups - outreach to restaurants on impact of grease clogging storm drains
- Develop alternative information sources, such as web sites, bumper stickers, refrigerator magnets, posters for bus and subway stops, and restaurant placemats
- Storm Drain Stenciling
- Brochures on proper use and disposal of landscape and garden chemicals/fertilizers
- Develop educational programs for school-age children
- Include information on the water quality of nearby rivers/lakes in community mailings
- Survey the public's knowledge on water quality

SUGGESTED TARGET DATE ACTIVITY

YEAR 1..... Brochures developed (bilingual, if appropriate) and distributed in water utility bills; a storm water hotline in place; volunteer educators trained.

YEAR 2..... A web site created; school curricula developed; storm drains stenciled.

YEAR 3..... A certain percentage of restaurants no longer dumping grease and other pollutants down storm sewer drains.

YEAR 4..... A certain percentage reduction in litter or animal waste detected in discharges.

MEASURE 2 - PUBLIC INVOLVEMENT/PARTICIPATION

GOAL OF CONTROL MEASURE: Involve the public in stormwater management

MUST:

- Comply with State, Tribal and local public notice requirements

RECOMMEND:

- Provide opportunities for the public to participate, such as:
- Local storm water management panel
- Volunteer monitoring
- Set up a local storm water management panel which includes members of the public

- Establish volunteer water quality monitoring program
- Stream Clean Up Days
- Use volunteers groups to find/map outfalls
- Set up a hotline for water quality complaints

SUGGESTED TARGET DATE ACTIVITY

YEAR 1..... Notice of a public meeting in several different print media and bilingual flyers; citizen panel established; volunteers organized to locate outfalls/illicit discharges and stencil drains.
YEAR 2..... Final recommendations of the citizen panel; radio spots promoting program and participation.
YEAR 3..... A certain percentage of the community participating in community clean-ups.
YEAR 4..... Citizen watch groups established in a certain percentage of neighborhoods; outreach to every different population sector completed.

MEASURE 3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION

GOAL OF CONTROL MEASURE: All calls or testing results indicating possible contamination are examined to determine the appropriate response or action necessary. Commercial, industrial, and institutional facilities are notified of the federal, state, and local permit requirements for storm water discharges to the neighborhood waterways and the potential to pollute. Each facility receives informational correspondence, a request to schedule an inspection to determine if there is the potential to pollute; follow up reporting and, if necessary, an investigation of any illegal activity.

MUST:

- Develop a sewer system map of all outfalls and the names of all receiving waters
- Prohibit non-storm water discharges, through an ordinance or other means, and implement appropriate enforcement procedures
- Implement a plan to detect and address non-storm water discharges
- Inform public of hazards associated with illegal discharges and improper disposal of waste

RECOMMEND:

- A plan with procedures for:
 - Locating priority problem areas
 - Tracing the source of an illicit discharge
 - Removing the source
 - Program evaluation & assessment
- Promotion of public reporting of discharges
- Distribution of outreach materials
- Storm drain stenciling
- Collect all existing information on outfall locations and then conduct field surveys to verify locations.
- Coordinate volunteers for locating outfalls or stenciling storm drains.
- Develop storm water ordinance to prohibit illicit discharges;
- Locate problem areas for detailed screening using methods such as public complaints; visual screening; water sampling from man-holes and outfalls during dry weather; and infrared and thermal photography.
- Determine the source of the problems using methods such as:
 - dye-testing buildings in problem areas;
 - dye- or smoke-testing buildings at the time of sale;
 - tracing the discharge upstream in the storm sewer;
 - employing a certification program that shows that buildings have been checked for illicit connections;
 - implementing an inspection program of existing septic systems; and
 - using video to inspect the storm sewers.
- Educate and work with dischargers found to be sources of illicit connections.
- Develop informative brochures on proper disposal methods for specific audiences and school curricula.
- Design a program to publicize and facilitate public reporting of illicit discharges.
- Initiate recycling programs for commonly dumped wastes, such as motor oil, antifreeze, and pesticides.

SUGGESTED TARGET DATE ACTIVITY

YEAR 1.....Sewer system map completed; recycling program for household hazardous waste in place.
YEAR 2..... Ordinance in place; training for public employees completed; a certain percentage of sources of illicit discharges determined.
YEAR 3..... A certain percentage of illicit discharges detected; illicit discharges eliminated; and households participating in quarterly household hazardous waste special collection days.
YEAR 4..... Most illicit discharge sources detected and eliminated.

Next newsletter – the next three minimum control measures.