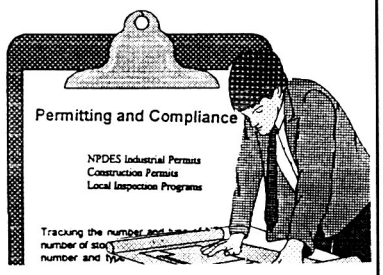
Environmental Indicator Profile Sheet



Indicator Profile No. 23

Permitting and Compliance

Category: **Programmatic**

Tools Used to Measure Indicators:

- NPDES Industrial Permits
- Construction Permits
- Local Inspection Programs

Description:

NPDES stormwater regulations require many municipal and industrial stormwater dischargers as well as construction site developers to obtain discharge permits. Permit requirements generally focus on identification and control of significant sources of nonpoint source pollution. Most permits also require implementation of pollutant reduction measures. These measures encompass structural BMPs such as sediment control basins and non-structural measures such as good housekeeping and personnel training.

Tracking the number and type of NPDES stormwater permits issued, the number of stormwater discharges in compliance with their permits, and the number and type of BMPs implemented in conjunction with the permits allows municipalities to gauge the relative impact of various pollutant sources (i.e., urban versus industrial versus construction), determine if regulatory baselines are being met, and identify the need for additional enforcement activities.

Utility of Indicator to Assess Stormwater Impacts:

- Can be used to identify potentially significant contributors of pollutants.
- Can be used to assess the level of industrial support for stormwater management efforts.
- Can be used by NPDES program managers to assess compliance with regulations and designate areas for improvement.
- Allows identification of uncontrolled sources of pollution to stormwater.

Advantages of Method:

- Permitting is already required by many states.
- Comprehensive permitting structures have already been established.
- The majority of the cost and time burden associated with implementation and identification of pollutant control measures is borne by private sources.
- Fosters communications between developers, industry, and regulatory agencies responsible for developing and implementing stormwater management strategies.

Indicator Useful for Assessing:

* Aquatic Integrity of:	
Lakes	○
Streams	○
Estuaries	○
* Land Use Impacts	◖
* Stormwater Mgmt Programs	◖
* Whole Watershed Quality	◖
* Industrial Sites	◖
* Municipal Programs	●

Key:	
Very Useful	●
Mod. Useful	◖
Not Useful	○

Indicator Advantages

* Geographic Range	●
* Baseline Control	●
* Reliable	◖
* Accuracy	◖
* Low cost	●
* Repeatable	●
* All Watershed Scale	◖
* Familiar to Practitioners	◖
* Easy to use & Low training	◖

Key	
Very Advantageous	●
Mod. Advantageous	◖
Not Advantageous	○

Cost

See Table 3.3E

Disadvantages of Method:

- Some industrial sites are reluctant to identify the most effective measures, instead opting for less expensive measures with meet the minimal requirements.
- Processing permits and inspections to ensure compliance require significant staff time.
- Many permitting programs are conducted under the auspices of State or regional EPA programs. Local and municipal jurisdictions and watershed advisory bodies may have difficulty in obtaining permit

Case Study: Newport, R.G. and T.E. Davenport. 1988
Stormwater Nonpoint Source Pollution Control
American Water Resources Association Technical Publication Series. TPS 88-4, p 183-193, 1988

The Rouge Basin in Southeast Michigan is a significant example of a situation where stormwater is contributing to use impairment. To address urban stormwater problems, EPA and State pollution control agencies will issue discharge permits to the owner/operators of stormwater collection and conveyance systems and related outfalls. These permits will require data collection and reporting, and the development and implementation of pollution reduction programs. In some cases, these programs will require capital improvements, but in many instances, the cost-effective approach for solving the problems will be BMPs. These BMPs will reduce the introduction of pollutants to the storm sewer through management of nonpoint source (NPS) pollution. Requiring nonpoint source control components as part of stormwater permits will ensure (1) that the permits address all pollutants originating from nonpoint sources; (2) that the BMPs required under the permits will economically control the identified pollutants; and , (3) that the NPS control activities identified will be fully implemented.

Method References:

- Permitting: *Watershed Protection and Stormwater Permitting Seminar*, August 29 and 30, 1990. Sponsored by North Carolina Sections of AWWA/WPCA and APWA..
- Compliance: Brinigar, S.C. et al. 1992. Complying with Storm Water Permits. Pollution Engineering. February 15, 1992.