

ACHIEVING BALANCE:

Improving public participation in West Virginia's NPDES permitting process

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West Virginia Rivers Coalition
Permit Analysis Program
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www.wvrivers.org

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WVRC'S PERMIT ANALYSIS PROGRAM

WVRC seeks to protect and restore West Virginia's exceptional rivers and streams. Visit www.wvrivers.org to learn more about WVRC.

WVRC's Permit Analysis Program promotes public participation in the state's water pollution discharge permitting process by conducting research, publishing reports, sponsoring workshops, serving as a resource for permit-related questions, and supporting watershed organizations in their efforts to watchdog local permits.

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ABBREVIATIONS

CFR	Code of Federal Regulations
CSR	Code of State Rules
CWA	Clean Water Act
DEP	West Virginia Division of Environmental Protection
DMR	Discharge Monitoring Report
EPA	U.S. Environmental Protection Agency
EQB	West Virginia Environmental Quality Board
FOIA	Freedom of Information Act
HUC	Hydrologic Unit Code
NEC	Not Elsewhere Classified
NPDES	National Pollutant Discharge Elimination System
OWR	DEP's Office of Water Resources
PCS	Permit Compliance System
PDF	Portable Document Format
PSD	Public Service District
QNCR	Quarterly Non-Compliance Report
SIC	Standard Industrial Classification
TU _a	Acute Toxic Unit
WET	Whole Effluent Toxicity
WQBEL	Water Quality-based Effluent Limit
WV	West Virginia

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ACHIEVING BALANCE: Improving public participation in West Virginia's NPDES permitting process

EXECUTIVE SUMMARY

1. INTRODUCTION

The federal Clean Water Act begins with an ambitious goal: “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” This goal relies on a range of programs that address the varied sources of water pollution. Municipal and industrial sources of pollution, called point sources because they discharge from discrete pipes, are regulated under the Clean Water Act through the National Pollutant Discharge Elimination System (NPDES). NPDES permits limit the amounts of pollutants that dischargers can release to water bodies, and specify self-monitoring requirements to ensure that permittees comply with assigned limits. This report focuses on municipal and industrial NPDES permits in West Virginia.

Public participation is central to the Clean Water Act. In fact, the very first section states that “Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States.”

Before NPDES permits can be issued, renewed, or modified in significant ways, the public must be provided an opportunity for comment. Anyone with an interest in permits—local residents, communities, organizations—has the right to comment on draft permits and to request public hearings. Taking advantage of that right requires a great deal of information, and public participation has been limited.

NPDES permits are of critical importance to the quality of the state's rivers and lakes. Ninety-two major dischargers are permitted across the state. These include 53 large industrial facilities as well as 39 municipal wastewater treatment plants and public service districts that serve the state's larger cities, towns, and counties. Although the distinction is sometimes complex, major dischargers are generally the largest facilities or those with the potential for the most harmful releases. More than one thousand minor permits have been issued for smaller facilities. West Virginia's permitted facilities discharge many millions of pounds of pollutants each year; an estimated 7.2 million pounds of toxic pollutants were discharged in 1997 alone.

Permitting law, regulations, and guidance provide latitude in establishing and enforcing pollution limits, and permitted facilities typically make maximum use of this latitude. But it is the local citizenry that fishes in, swims in, and draws drinking water from receiving water bodies. The public has not been made sufficiently aware of the judgment afforded permitting agencies or the power it has to protect local waters by participating in the permitting process.

The state Division of Environmental Protection (DEP) has taken several positive steps in recent years to promote public involvement; for example, DEP's Web site contains several searchable databases and mapping systems, their *Citizen's Guide* explains how citizens can participate in the permitting process, and their *Guide to Environmental Permitting in West Virginia* explains the basics of all of DEP's permitting programs.

But as citizens and organizations become more sophisticated in their use of the Clean Water Act’s public participation provisions, there is a need for more efficient and more transparent information transfer from DEP, which issues NPDES permits, to the public. Changes recommended in this report will allow for a much greater level of informed public participation in the permitting process.

Recommendations are developed based on a review of randomly selected permits that investigates public participation and seven aspects of the permitting process. Implementing these recommendations will enhance the ability of local citizens to participate in the permitting process and to ensure that permits account for local concerns.

2. THE CLEAN WATER ACT

The Clean Water Act set a goal of eliminating the discharge of pollutants into the nation’s water bodies, reinforced by the program name “National Pollutant Discharge Elimination System.” To help reach this goal, the Act makes it unlawful to discharge pollutants from point sources into water bodies unless NPDES permits are obtained. Discharging pollutants is therefore a privilege granted by the public, the need for which is eventually to be eliminated.

In West Virginia, the U.S. Environmental Protection Agency (EPA) delegates responsibility for administering the NPDES program for non-mining permits to the DEP’s Office of Water Resources (OWR). Mining discharge permits, handled by another DEP office, are not considered in this report.

OWR staff perform a range of tasks to implement the NPDES program. They process permit applications, develop draft permits, monitor compliance, and initiate enforcement actions when necessary. The Clean Water Act calls for public participation in most of these tasks.

3. SELECTING AND REVIEWING PERMITS

A total of 92 major municipal and industrial facilities and more than one thousand minor facilities are permitted in West Virginia. As a framework for investigating issues related to citizen involvement in the NPDES permitting process, this report reviews a selection of the state’s major dischargers. Nineteen of these facilities—one fifth of the total—were randomly selected for review. These facilities are scattered across many of the state’s watersheds.

Permit files were inspected by the author, and relevant documents were copied for further analysis. Information found in permit files was supplemented with compliance information from EPA. Background research included conversations with OWR staff and non-agency professionals involved in permitting issues, as well as examinations of state and federal laws, regulations, policies, and guidance.

4. PUBLIC PARTICIPATION

The Clean Water Act contains several allowances for agency judgment on permit-related actions. In these instances, OWR retains flexibility in addressing the concerns of permitted dischargers and the public alike. To learn of concerns, every new and renewed discharge permit is issued in draft for a 30-day public comment period. During the comment period, individuals or organizations may submit comments to OWR and may also request public hearings, which the OWR chief must schedule when she finds a significant degree of public interest in issues relevant to the draft permit.

Three related aspects of public participation are reviewed here: the frequency with which citizens participate in the process; the methods OWR uses to notify the public of permitting actions; and fact sheets, which are the primary documents that OWR uses to explain permitting decisions to the public.

Based on the permit files reviewed, citizens and organizations rarely take advantage of their opportunities to review draft permits. Of the nineteen permits considered in this report—which, due to renewals, make up more than nineteen comment periods—only one public comment was found in permit files. This stands in contrast to the participation of the permittees themselves, who submitted comments on draft permits for all nineteen facilities, often requesting that OWR weaken or eliminate discharge limits or monitoring requirements.

One reason for this lack of public participation may simply be that citizens are not aware that permitting decisions are being made. OWR uses three mechanisms for public notification. First, they generate a public notice, which the permittee then publishes in an approved local newspaper. Because public notices are typically only published in the Classified section, many people are likely to miss them. Second, OWR periodically publishes its *Public Notice Bulletin*, which lists all NPDES permits that are open for comment. However, because it is not published very frequently, comment periods often conclude before they are announced. Finally, regulations require OWR to maintain area-based mailing lists and to send public notices directly to people on these lists. While these lists may be the most effective way to notify the public of permitting decisions in their local areas, they are underutilized.

Once citizens have cleared the notification hurdle and are aware of a permitting decision, they require information in order to understand the permit. The most important document that promotes informed public participation is called a “fact sheet.” The Clean Water Act requires that fact sheets accompany draft permits in order to explain permit writers’ calculations and to justify each discharge limitation and monitoring requirement. It is important that fact sheets contain enough detailed technical information to clearly explain the discharge limits and monitoring requirements. Because most people do not have detailed knowledge about the NPDES permitting system, it is also important that they contain enough basic background information so that people can understand them. Minor changes could turn fact sheets into one of OWR’s best public information tools.

5. PERMITS AND THE PERMITTING PROCESS

After people learn about their opportunities to provide comment and have access to sufficient background information, they are faced with the challenge of understanding the draft permit and applying the relevant laws and regulations. This report reviews seven aspects of discharge permits and the permitting process that may be most accessible for public analysis. These include permit durations, antidegradation, effluent limits, modifications, monitoring, compliance, and enforcement.

Permit durations

Permits generally must be renewed every five years. This limited time period affords OWR regular opportunities to incorporate up-to-date regulations, policies, and guidance into permits; ensures that permits reflect current conditions at the facilities and in the receiving water bodies; and affords interested citizens periodic opportunities to learn about and comment on the permits. OWR is transitioning as planned into the Watershed Management Framework schedule, which synchronizes permit renewals by watershed. It is important that they maintain this system. Predictable cycles not only benefit OWR, but also make it easier for citizens and organizations to track permits in their watersheds.

Antidegradation

The CWA's antidegradation provisions are meant to be an integral component of the permitting process: They ensure that clean water bodies stay clean, and that water quality is not degraded unless clear economic or social benefits outweigh the benefits of clean water. Antidegradation procedures may affect whether or not permits are issued, and may also affect discharge limits of those that are issued. To date, West Virginia has not established an antidegradation implementation policy.

No reviewed permits or permit files demonstrate that calculations were performed to determine if degradation will occur. Because OWR has not performed these calculations, it is impossible to know if any dischargers should have been subject to antidegradation reviews. As the state comes to an agreement on its new antidegradation implementation policy, OWR will receive clearer guidance on these issues. Degradation calculations and antidegradation reviews will be among the first steps OWR takes with every permit issuance and renewal, and will be of great interest to participants in the permitting process.

Effluent limits

Effluent limits are the most important aspect of permits: They set the maximum allowable pollutant levels that can be discharged from permitted facilities. Several calculations and decisions come together to determine effluent limits.

Reasonable potential analyses determine whether standard technology-based effluent limits are sufficient to protect water quality in the receiving water body, or more stringent water quality-based effluent limits are necessary. In none of the nineteen reviewed permits were all required reasonable potential analyses performed; therefore, it is not possible to know if all required water quality-based effluent limits have been issued.

The review also shows that mixing zones—which allow effluent limits to be less stringent—are or will be a factor in effluent limit calculations for six of the reviewed permits. Variances, which typically allow less stringent discharge limits to be issued, impact effluent limits for four of the reviewed facilities. Five reviewed permits incorporate compliance schedules; these schedules typically allow compliance with effluent limits to be delayed while facilities study, design, or construct new systems.

Reasonable potential analyses, mixing zones, variances, and compliance schedules are important mechanisms that establish effluent limits and that determine when they take effect. Information about why they are used, how they are justified, and how they impact effluent limits is crucial to enable the public to understand and participate in these key permitting decisions.

Modifications

Permits are often modified between renewal dates. Minor modifications are used to accomplish several types of non-substantive changes, while all other modifications are defined as major and require new fact sheets and draft modifications that are subject to public notice and comment.

For the nineteen reviewed permittees, a total of 37 modifications were approved by OWR after the most recent issuance of their permits. Several of these modifications are clearly minor modifications, but most reviewed modifications are major modifications. However, only one of the 37 modifications shows evidence that a fact sheet was developed and that a public comment period was held. Substantive modifications that relax discharge limits or monitoring frequencies, or that allow major physical alterations to permitted facilities, deserve the same level of public scrutiny as permit applications and renewals.

Monitoring

All NPDES permits contain monitoring requirements in addition to discharge limitations. Monitoring requirements specify the frequency with which the permittee is to monitor each pollutant, the sampling methods, the locations where samples are to be taken, the analytical techniques, and the frequency with which monitoring data must be submitted to OWR and EPA. Typically, monitoring data are submitted monthly.

Fact sheets are required to justify all monitoring requirements. Although several monitoring requirements are typically at least mentioned in fact sheets, no fact sheets for reviewed permits contained clear justifications for monitoring requirements for all pollutants.

Compliance

Permits are only effective if dischargers comply with them. Seven of the nineteen reviewed facilities appear on EPA's Quarterly Non-Compliance Reports during a recent two-year period, indicating persistent non-compliance with monthly average limits or other specified permit conditions. During the same time period, at least eleven of the nineteen reviewed permits had three or more violations, several of which are not considered by EPA when developing its reports. Clearly, compliance is an ongoing issue that requires public attention.

Enforcement

When faced with non-compliance, DEP has several enforcement options at its disposal. Generally, enforcement begins with the most benign response and is escalated as necessary. Three common enforcement actions include notices of violation, administrative orders, and civil lawsuits. In the past five years, DEP issued notices of violation to five of the reviewed permittees. They issued administrative orders that directly relate to violations of numeric limits to four permittees, and initiated civil actions against four. While these actions demonstrate a willingness to enforce permit compliance in some cases, enforcement is not consistent. For example, this report documents compliance problems at seven of the eight reviewed municipal facilities, but DEP only initiated enforcement actions against four of these facilities.

The Clean Water Act also encourages public enforcement, either by lodging complaints with DEP or, as a last resort, by bringing civil actions against dischargers with compliance problems. Two of the reviewed permittees, both municipal dischargers, were the subject of enforcement actions by the American Canoe Association for permit violations.

6. RECOMMENDATIONS

This analysis of nineteen randomly selected permits highlights several aspects of OWR's permitting process that are important for public participation. This review demonstrates both a need and a responsibility for OWR to improve the flow of information to citizens and organizations interested in participating in the NPDES permitting process.

Recommendations for OWR fall into three categories: improving strategies for public notice, providing easy and comprehensive access to permit-related information, and overcoming other obstacles to public participation. Several specific recommendations are made within each of these areas; these recommendations are discussed in greater detail in the full report.

Improving strategies for public notice

OWR already notifies the public of impending permit decisions by requiring permittees to publish public notices in local newspapers and by making subscriptions available to its *Public Notice Bulletin*. The following recommendations address additional steps that OWR can take to ensure that more people are informed of permitting decisions:

- Widely publicize watershed-based mailing lists.
- Publish the *Public Notice Bulletin* more frequently.
- Automatically send public notices directly to watershed groups.
- Publish display advertisements for decisions on major permits.
- Clearly document rationales for classifying modifications as major or minor, and promote public participation in major modification decisions.

Providing easy and comprehensive access to permit-related information

Once citizens and organizations are aware of permitting decisions, they require information in order to understand the permit. OWR already partially satisfies these needs by developing fact sheets, posting certain documents on the Web, and responding to Freedom of Information Act requests. But OWR can take additional steps that will make fact sheets more useful to the public, take better advantage of its Web site, and streamline the Freedom of Information Act process.

Making fact sheets more useful to the public

- Document antidegradation calculations and reviews.
- Document reasonable potential analyses.
- Document mixing zones and variances.
- More clearly document monitoring frequencies.
- Include additional compliance and enforcement information.
- Indicate where DEP has searched for receiving water data.
- Include references to general background information.

Taking better advantage of OWR's Web site

OWR's Web site already includes several useful documents and search capabilities that aid public participation in the permitting process. Many of these features have been added recently through the implementation of the agency's technology improvement project. However, several additional steps can be taken that are specifically tailored to facilitating public participation:

- Package public participation-related information on a single page.
- Post public notice-related information.
- Post permit-specific information.
- Post general Clean Water Act and NPDES information.
- Improve OWR's online Permit Information System.

Streamlining the Freedom of Information Act process

- Provide NPDES searches by watershed for small watersheds.
- Provide default information about NPDES permits.

Overcoming other obstacles to public participation

Stimulating effective public participation involves more than simply notifying the public of impending decisions and making information available. Because most people are busy and can only devote a small amount of time to permitting issues, OWR can help citizens participate by ensuring that the Clean Water Act is fully implemented. This would lessen the burden on the public to research the Act and would allow people to concentrate instead on aspects of the permitting process that are typically relevant for public comment. Recommendations include:

- When employing compliance schedules, leave original numeric limits in place.
- Publish an explicit policy that assesses consistent and stiff penalties for violations.
- Adopt a strong antidegradation implementation policy.
- Conduct reasonable potential analyses for all pollutants.
- Provide additional support to watershed groups for permit-related activities.

7. CONCLUSIONS

West Virginia's NPDES permitting process has generally not been subject to the level of public review and participation envisioned by the Clean Water Act. This report provides a basis for sparking a greater level of informed public participation by reviewing a randomly selected set of the state's major permits, assessing key aspects of each permit, and providing recommendations that would improve the flow of information from DEP to the public.

OWR is administering a complex and important program that has gone a long way toward improving the state's water quality. Recent improvements, such as synchronizing permit renewals by watershed in five year cycles, help make the permitting process more accessible to the public. This report's recommendations aim to further increase OWR's accommodation of public involvement in the permitting process.

DEP would benefit in many ways from implementing this report's recommendations. Permit writers, presented with a broader range of local information, will be better able to tailor permits to address local concerns. An open and constructive participation process will also elevate DEP's reputation as the public sees that they consider not only the comments of the regulated industry, but also the comments of others who are affected by permitting decisions.

Balance is important, not just between the public and the permittees, but also between OWR responsibilities and OWR resources. Implementing this report's recommendations would likely require additional funding. There is recent precedent for securing increased OWR funding with the support of key constituents. Improved public participation would benefit a range of stakeholders across the state who would likely be interested in helping to identify new funding needs and in working to make sure these needs are met.

Public participation is essential for achieving balance in the NPDES permitting process. A greater level of public participation will help ensure that permitting decisions are made in the open, take local suggestions into account, follow all applicable laws and regulations, and contribute to the conservation and restoration of the state's water bodies.

1. INTRODUCTION

The federal Clean Water Act (CWA) begins with an ambitious goal: “to restore and maintain the chemical, physical, and biological integrity of the Nation's waters” (CWA Section 101(a)). This goal relies on a range of programs that address the varied sources of water pollution. Municipal and industrial sources of pollution, called point sources because they discharge from discrete pipes, are regulated under the CWA through the National Pollutant Discharge Elimination System (NPDES). NPDES permits limit the amounts of pollutants that dischargers can release to water bodies, and specify self-monitoring requirements to ensure that permittees comply with assigned limits. This report focuses on municipal and industrial NPDES permits in West Virginia (WV).

Public participation is central to the CWA. In fact, the very first section states that “Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States” (CWA Section 101(e)).

Before NPDES permits can be issued, renewed, or modified in significant ways, the public must be provided an opportunity for comment. Anyone with an interest in permits—local residents, communities, organizations—has the right to comment on draft permits and to request public hearings. Taking advantage of that right requires a great deal of information, and public participation has been limited.

NPDES permits are of critical importance to the quality of the state's rivers and lakes. Ninety-two major dischargers are permitted across the state. These include 53 large industrial facilities as well as 39 municipal wastewater treatment plants and public service districts that serve the state's larger cities, towns, and counties. Although the distinction is sometimes complex, major dischargers are generally the largest facilities or those with the potential for the most harmful releases.¹ More than one thousand minor permits have been issued for smaller facilities (Sangani, 2000). West Virginia's permitted facilities discharge many millions of pounds of pollutants each year; an estimated 7.2 million pounds of toxic pollutants were discharged in 1997 alone (PIRG, 2000).

Permitting law, regulations, and guidance provide latitude in establishing and enforcing pollution limits, and permitted facilities typically make maximum use of this latitude. But it is the local citizenry that fishes in, swims in, and draws drinking water from receiving water bodies. The public has not been made sufficiently aware of the judgment afforded permitting agencies or the power it has to protect local waters by participating in the permitting process.

The state Division of Environmental Protection (DEP) has taken several positive steps in recent years to promote public involvement; for example, DEP's Web site contains several searchable databases and mapping systems (DEP, 2001a), their *Citizen's Guide* explains how citizens can participate in the permitting process (DEP, Undated(a)), and their *Guide to Environmental Permitting in West Virginia* explains the basics of all of DEP's permitting programs (DEP, Undated(b)).

But as citizens and organizations become more sophisticated in their use of the CWA's public participation provisions, there is a need for more efficient and more transparent information transfer from

¹ Facilities are classified as major or minor based on a worksheet that assigns points for factors such as the size of the facility and the receiving water body and the types of pollutants discharged. All municipal facilities that discharge more than one million gallons per day are classified as major facilities. Permit writers have the ability, at their discretion, to classify any facility as a major facility.

DEP, which issues NPDES permits, to the public. Changes recommended in this report will allow for a much greater level of informed public participation in the permitting process.

Recommendations are developed based on a review of randomly selected permits that investigates public participation and seven aspects of the permitting process: permit durations, antidegradation, effluent limits, modifications, monitoring, compliance, and enforcement. Implementing these recommendations will enhance the ability of local citizens to participate in the permitting process and to ensure that permits account for local concerns.

2. THE CLEAN WATER ACT

The CWA is our nation's most fundamental water quality law. The Federal Water Pollution Control Act of 1972 serves as the foundation for the CWA; amendments in 1977 and 1987 expanded and refined the Act. The Act is implemented through federal regulations and guidance, as well as state laws, regulations, and policies. The CWA divides pollutant discharges into point sources and nonpoint sources, and considers different mechanisms for reducing and eliminating pollutants from each type of source.

2.1 Point sources and the National Pollutant Discharge Elimination System

Point sources are defined as follows:

The term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture (CWA Section 502).

An important category of point sources includes wastewater treatment plants, public service districts (PSDs), and other facilities that collect and treat human sewage. Although not always the case, these facilities are usually owned by municipalities and are therefore often referred to as municipal point source dischargers. The second important category of point sources, industrial facilities, include the full range of industries that discharge pollutants to water bodies. Other types of operations also fall into the point source category, but municipal and industrial facilities make up the majority of point source dischargers and are the focus of this report.

The CWA set a goal of eliminating the discharge of pollutants into the nation's water bodies (CWA Section 101(a)(1)), reinforced by the program name "National Pollutant Discharge Elimination System." To help reach this goal, the Act makes it unlawful to discharge pollutants from point sources into water bodies unless NPDES permits are obtained (CWA Section 301). Discharging pollutants is therefore a privilege granted to point source facilities by the public, the need for which is eventually to be eliminated.

In West Virginia, the U.S. Environmental Protection Agency (EPA) delegates responsibility for administering the NPDES program to the DEP's Office of Water Resources (OWR).² Even so, EPA still sets minimum federal standards and retains oversight of OWR's actions.

OWR staff perform a range of tasks to implement the NPDES program. They process permit applications, develop draft permits, monitor compliance, and initiate enforcement actions when necessary. The CWA calls for public participation in most of these tasks.

2.2 Nonpoint sources

Nonpoint sources, not considered in this report, include all pollutant sources other than those defined as point sources. Typically, nonpoint source discharges are precipitation-induced and depend on land use and land management practices. Farms, forestry operations, urban areas, abandoned coal mines, and even undisturbed forests contribute some nonpoint source pollutants to the state's rivers. Management of nonpoint source pollutants is generally accomplished through voluntary programs.

² NPDES permits for mining operations in WV are developed by DEP's Office of Mining and Reclamation. Mining permits are not considered in this report.

3. SELECTING AND REVIEWING PERMITS

A total of 92 major municipal and industrial facilities and more than one thousand minor facilities are permitted in West Virginia (Sangani, 2000). As a framework for investigating issues related to citizen involvement in the NPDES permitting process, this report reviews a selection of the state's major dischargers.

Nineteen of these facilities—one fifth of the total—were randomly selected for review. Table 1 shows the 53 major industrial facilities arranged into categories, with those selected for review highlighted in bold. To ensure that the selected industrial facilities represent the diversity found across the state, facilities were separated into categories based on standard industrial classification (SIC) codes when three or more permits were found for a code. Then, one-fifth of the facilities in each category were randomly chosen. Table 2 shows the 39 major municipal permits, with those selected for review highlighted in bold.

Figure 1 illustrates the locations of the selected facilities, which are scattered across many of the state's watersheds. Seven facilities discharge into the Ohio River on WV's western border. Seven also discharge into the Kanawha River or its tributaries; the Kanawha River flows through Charleston, the capital, before joining the Ohio River at Huntington. Three facilities are located in the Monongahela watershed. The Monongahela River flows north to Pittsburgh where it joins with the Allegheny River to form the Ohio. One facility—VEPCO's Mount Storm Station—discharges in the Potomac watershed near the Maryland border, and the City of Welch's municipal facility discharges to the Tug Fork River on the state's southern border with Kentucky.

Permit files, housed at OWR, were inspected by the author, and relevant documents were copied for further analysis. These documents typically included permits; fact sheets; permit applications; calculations and notes from permit writers; compliance inspection reports and responses from permittees; general correspondence between the permittees, OWR, and other agencies; enforcement actions taken by agencies or citizens; reports and analyses prepared by permittees to satisfy permit conditions; and public comments.

Information found in permit files was supplemented with Quarterly Non-Compliance Reports (QNCRs) that are compiled by EPA. Online searches using EPA's permit compliance system (PCS) database were also used for additional compliance information. Background research included conversations with OWR staff and non-agency professionals involved in permitting issues, as well as examinations of state and federal laws, regulations, policies, and guidance.

From time to time, various aspects of permits change. Permits are renewed upon expiration, and are sometimes extended or modified between renewal dates. Compliance records may change from month to month, and enforcement efforts are ongoing. This report therefore captures only a single snapshot in time. Most research for this report was conducted in mid- to late 2000, and information about each permit is accurate only through the time that the particular permit file was reviewed. Also, this report relies on documentation of events and actions found in permit files; therefore, some tables and graphs may overlook events or actions if permit files were not entirely complete or up-to-date.

Table 1: All major industrial permits in WV and those selected for review

Map code	Permittee	NPDES ID	Category
1	Bayer	WV0005169	Cyclic crudes and intermediates
	GE Specialty Chemicals	WV0022047	“”
	Koppers Industries	WV0004588	“”
	Dana Transport	WV0050130	Trucking, except local
	Quala Systems	WV0002372	“”
2	TOW Maintenance & Cleaning	WV0001708	“”
	Appalachian Power: Philip Sporn	WV0001058	Electric services
	Appalachian Power: Kanawha River	WV0001066	“”
	Appalachian Power: John E. Amos	WV0001074	“”
3	Appalachian Power: Mountaineer	WV0048500	“”
	Monongahela Power: Willow Island	WV0000761	“”
	Monongahela Power: Rivesville	WV0004715	“”
	Monongahela Power: Albright	WV0004723	“”
	Monongahela Power: Fort Martin	WV0004731	“”
	Monongahela Power: Harrison	WV0005339	“”
	Monongahela Power: Pleasants	WV0023248	“”
4	Morgantown Energy Associates	WV0078425	“”
	Ohio Power: Kammer	WV0005291	“”
	Ohio Power: Mitchell	WV0005304	“”
5	VEPCO: Mount Storm	WV0005525	“”
	Akzo Nobel Chemicals	WV0002496	Industrial organic chemicals, NEC
	Aventis Corp Science USA	WV0000086	“”
6	Clearon/Olin Chemicals	WV0073679	“”
	Cytec Industries	WV0000787	“”
7	DuPont: Belle	WV0002399	“”
	Flexsys America	WV0000868	“”
	FMC: Nitro	WV0000400	“”
	FMC: Spring Hill	WV0000442	“”
	GE Specialty Chemicals	WV0004740	“”
	Kincaid Enterprises	WV0000108	“”
	Union Carbide	WV0000078	“”
	Union Carbide	WV0000124	“”
	Aristech Chemicals	WV0001112	Plastics materials and resins
8	DuPont: Washington Works	WV0001279	“”
	GE Plastics	WV0000841	“”
	Shell Chemical Company	WV0000132	“”
	Witco	WV0000094	“”
	PPG Industries-Natrium	WV0004359	Alkalies and chlorine
9	Wheeling-Pitt. Steel: Follansbee	WV0004499	Blast furnaces and steel mills
	Wheeling-Nisshin	WV0004502	“”
10	UCAR Carbon	WV0004707	Carbon and graphite products
	Philips Lighting	WV0005240	Electric lamps
	Elkem Metals	WV0000167	Electrometallurgical products
	Regeneration Technologies	WV0073598	Industrial furnaces and ovens
	Weirton Steel	WV0003336	Metal coating and allied services
	Wheeling-Pitt. Steel: Beech Bottom	WV0004511	“”
	Ergon-West Virginia	WV0004626	Petroleum refining
	Spectratech International	WV0005533	Photographic equipment and supplies
	Hester Industries	WV0047236	Poultry slaughtering and processing
	Wampler-Longacre	WV0005495	“”
11	Century Aluminum of WV	WV0000779	Primary aluminum
	American Fiber Resources	WV0110434	Pulp mills
	AC&S	WV0075621	Railroad equipment

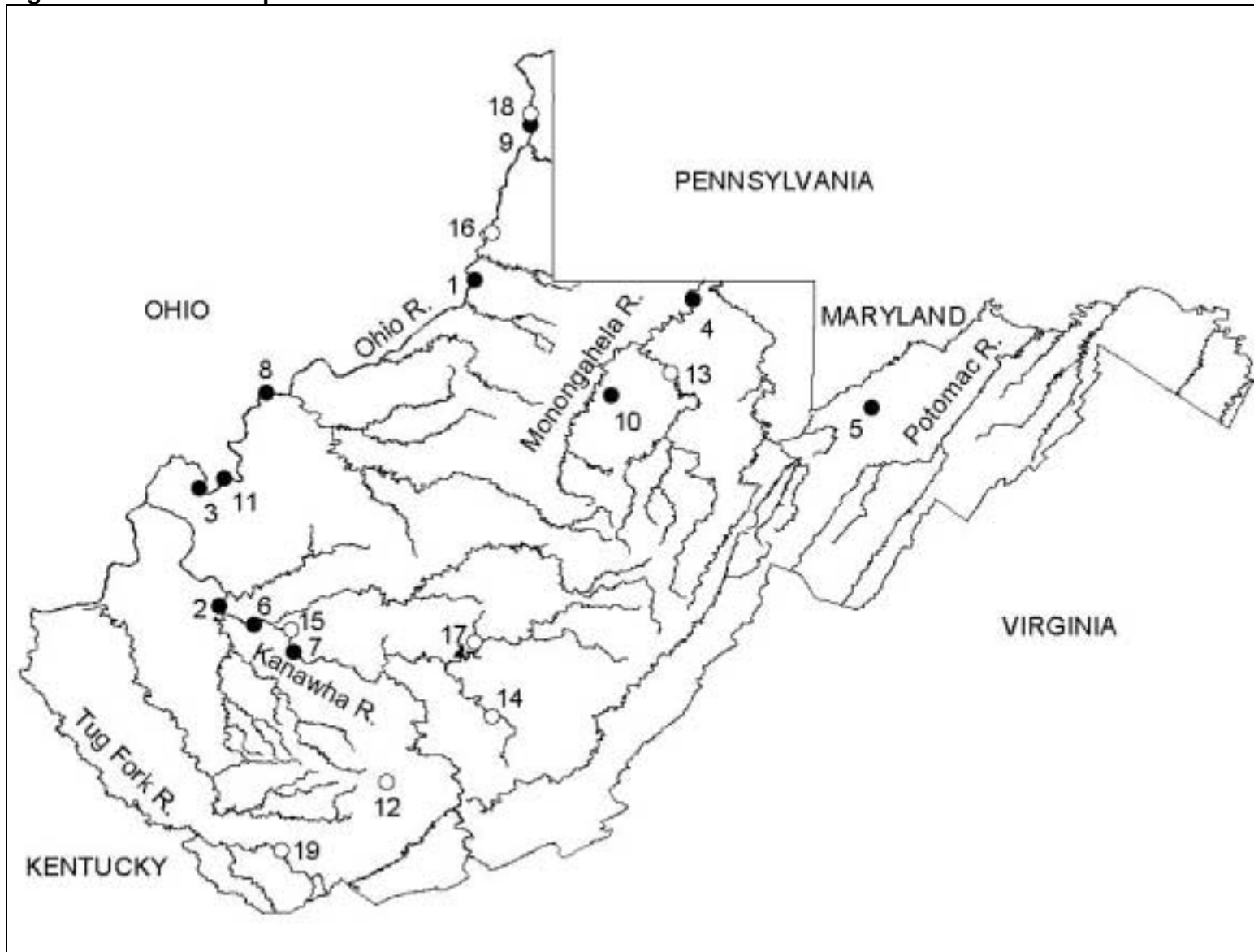
Note: Highlighted permits were randomly selected for review. Map codes are used in Figure 1. Mining permits are not considered in this report. NEC=Not Elsewhere Classified.

Table 2: All major municipal permits in WV and those selected for review

Map code	Permittee	NPDES ID
	Beckley, City of	WV0023183
	Bluefield Sanitary Board	WV0023141
	Bridgeport, City of	WV0025461
	Buckhannon, City of	WV0032336
	Charles Town, City of	WV0022349
	Charleston, City of	WV0023205
	Clarksburg Sanitary Board	WV0023302
12	Crab Orchard/MacArthur PSD	WV0082309
	Dunbar, City of	WV0028118
	Elk Pinch PSD	WV0080900
	Elkins, City of	WV0020028
	Fairmont, City of	WV0023353
13	Grafton, City of	WV0021822
	Green Valley-Glenwood PSD	WV0082627
14	Greenbrier County PSD No. 2	WV0040525
	Huntington, City of	WV0023159
	Hurricane, City of	WV0028151
	Kanawha Falls PSD	WV0034991
	Keyser, City of	WV0024392
15	Malden PSD	WV0050610
	Martinsburg, PSD	WV0023167
	Morgantown, City of	WV0023124
16	Moundsville, City of	WV0023264
	New Martinsville, City of	WV0027472
	Nitro, City of	WV0023299
	Parkersburg Utility Board	WV0023213
	Princeton, City of	WV0023094
	Ronceverte, City of	WV0024236
	South Charleston Sewage Treatment Co.	WV0023166
	St Albans, City of	WV0023175
17	Summersville, Town of	WV0020630
	Union PSD	WV0037486
18	Weirton, City of	WV0023108
19	Welch, City of	WV0024589
	Wellsburg, City of	WV0026832
	Weston, City of	WV0028088
	Wheeling, City of	WV0023230
	White Sulphur Springs, City of	WV0084000
	Williamson, City of	WV0026271

Note: Highlighted permits were randomly selected for review. Map codes are used in Figure 1. PSD=Public Service District.

Figure 1: Locations of permits selected for review



Note: Map codes are from Tables 1 and 2. Industrial facilities are numbered 1 through 11 and municipal facilities are numbered 12 through 19.

4. PUBLIC PARTICIPATION

The CWA contains several allowances for agency judgment on permit-related actions. In these instances, OWR retains flexibility in addressing the concerns of permitted dischargers and the public alike. To learn of concerns, every new and renewed discharge permit is issued in draft for a 30-day public comment period. During the comment period, individuals or organizations may submit comments to OWR and may also request public hearings, which the OWR chief must schedule when she finds a significant degree of public interest in issues relevant to the draft permit.

Public participation can also play a key role in the WV Environmental Quality Board's (EQB's) proceedings that affect NPDES permits. For example, the EQB recommends changes to the state's water quality standards, which are used as the foundation for computing many permit limits. And the EQB considers requests for variances and hears appeals on permitting decisions and enforcement actions. This report focuses on participation as it relates to OWR's permitting actions.

Three related aspects of public participation are reviewed here: the frequency with which citizens participate in the process; the methods OWR uses to notify the public of permitting actions; and fact sheets, which are the primary documents that OWR uses to explain permitting decisions to the public.

4.1 *Comment frequency*

Figure 2 shows that, based on the permit files reviewed, citizens and organizations rarely take advantage of their opportunities to review draft permits. Of the nineteen permits considered in this report—which, due to renewals, make up more than nineteen comment periods—only one public comment was found in permit files. This comment was submitted by the Affiliated Construction Trade Foundation regarding the permit for DuPont's Belle facility. In this case, a public hearing was also requested, but was not granted by the OWR chief.³

Figure 2 also contrasts this limited public involvement with the participation of the permittees themselves, who submitted comments on draft permits for all nineteen facilities.⁴ Often, these comments requested that OWR weaken or eliminate discharge limits or monitoring requirements. As illustrated by their comments, permittees are generally aware of the implications of their permits and use comment periods to advocate for their agenda. In contrast, participation by others impacted by the permit is lacking and can be improved.

4.2 *Public notification methods*

One reason for this lack of public participation may simply be that citizens are not aware that permitting decisions are being made. OWR uses three mechanisms for public notification. They generate a public notice, which the permittee then publishes in an approved local newspaper. Because public notices are typically only published in the Classified section, many people are likely to miss them.

³ The public hearing was requested in 1992, and the OWR chief apparently denied the hearing on the basis that no issue of substantial public interest was involved.

⁴ During the comment period for the Century Aluminum permit, a comment was also submitted by Kaiser Aluminum and Chemical Corporation, which previously owned the Century Aluminum facility, still owns two parcels within the boundaries of the facility, and maintains an interest in the operation of blocking wells and the requirements placed on the discharge from the wells. Therefore, this comment is not considered a local citizen comment.

Figure 2: Comments submitted on reviewed permits



OWR also notifies the public of impending permit decisions by periodically publishing its *Public Notice Bulletin*. This newsletter lists all NPDES permits that are open for comment. However, because it is not published very frequently, comment periods often conclude before they are announced. For example, of the 18 NPDES permits listed in the February 2001 bulletin, 14 comment periods ended within a day after the bulletin was postmarked (DEP, 2001b). Unless it is published more frequently, the public clearly cannot rely on the *Public Notice Bulletin* for notification of permitting decisions.

Regulations require OWR to go beyond public notices in local newspapers and the *Public Notice Bulletin*. The regulations state that OWR must also send public notices directly to people on mailing lists that are focused on different areas of the state. People should have the opportunity to join these lists upon request; lists should also contain participants in past permit proceedings in each local area (40 CFR 124.10⁵, 47 CSR 10.12⁶). While these lists may be the most effective way to notify the public of permitting decisions in their local areas, they are underutilized.

Recommendations for improving public notification of permitting decisions are presented in Section 6.

4.3 Fact sheets

Once citizens have cleared the notification hurdle and are aware of a permitting decision, they require information in order to understand the permit. The most important document that promotes informed public participation is called a “fact sheet.”⁷ The CWA requires that fact sheets accompany draft permits in order to explain permit writers’ calculations and to justify each discharge limitation and monitoring

⁵ Regulations based on the Clean Water Act are contained in Title 40 of the Code of Federal Regulations. In this report, these regulations are referred to as “40 CFR” plus a section number (e.g., 40 CFR 124.10).

⁶ State NPDES program rules are contained in Title 47, Section 10 of the Code of State Rules. In this report, these regulations are referred to as “47 CSR 10” plus a section number (e.g., 47 CSR 10.12).

⁷ A fact sheet is developed for each major permit; a similar but less detailed “statement of basis” is developed for each minor permit.

requirement. Fact sheets also include other information such as comparisons with previous permits; summaries of past effluent monitoring data; facility descriptions; and discussions of variances, court cases, and appeals that may influence permitting decisions.

It is important that fact sheets contain enough detailed technical information to clearly explain the discharge limits and monitoring requirements. Because most people do not have detailed knowledge about the NPDES permitting system, it is also important that they contain enough basic background information so that people can understand them. Minor changes could turn fact sheets into one of OWR's best public information tools.

Section 6 contains several recommendations that will help improve fact sheets themselves, and that will provide easy public access to background permitting information that will allow the public to better understand fact sheets. Knowing when permits are up for public comment and having quick and easy access to relevant information are both essential for informed public participation in the permitting process.

5. PERMITS AND THE PERMITTING PROCESS

After people learn about their opportunities to provide comment and have access to sufficient background information, they are faced with the challenge of understanding the draft permit and applying the relevant laws and regulations. This section reviews seven aspects of discharge permits and the permitting process that may be most accessible for public analysis. These include:

- permit durations,
- antidegradation,
- effluent limits,
- modifications,
- monitoring,
- compliance, and
- enforcement.

These aspects are discussed in detail below.

5.1 *Permit durations*

Permits generally must be renewed every five years. This limited time period affords OWR regular opportunities to incorporate up-to-date regulations, policies, and guidance into permits; ensures that permits reflect current conditions at the facilities and in the receiving water bodies; and affords interested citizens periodic opportunities to learn about and comment on the permits. OWR does have the authority to extend permits beyond their original expiration dates.

Recently, this five-year renewal period has been temporarily affected by the implementation of DEP's Watershed Management Framework.⁸ According to the framework, the state's major watersheds are divided into five groups, labeled A through E, and all permit renewals are synchronized within each group (WVWMG, 1998). For example, the Monongahela River watershed is assigned to Group D; regardless of their issuance date, all permits in this watershed will next be renewed between July 2003 and June 2004.

To transition to this system, some older permits have been extended to last for up to eight years, while other recently issued permits will last for as few as three. Table 3 arranges all reviewed permits by group, and shows the duration of each permit. With two exceptions, the next renewal dates shown in this table correspond to the groups in which they are classified. These exceptions, the City of Moundsville and UCAR Carbon, are likely to be synchronized upon next renewal.

This framework streamlines the permitting process by dividing OWR's responsibilities relatively equally across the five-year cycle. Most importantly, the framework makes it more likely that decisions made for each permit will account for discharges from all other permits in the same watershed, as required by federal regulations (40 CFR 122.44(d)).

As shown in Table 3, OWR is transitioning as planned into the Watershed Management Framework schedule. Now that OWR has synchronized permit renewals by watershed, it is important that they

⁸ The Watershed Management Framework coordinates existing water quality programs and activities among several state and federal agencies to better achieve shared goals. A key component of the framework is the watershed management cycle, a five-year cycle that rotates through the following goals: scoping and screening, strategic monitoring and assessment, management strategy development, priority watershed management plan, and implementation (WVWMG, 1998).

maintain this system. Predictable cycles not only benefit OWR, but also make it easier for citizens and organizations to track permits in their watersheds.

Table 3: Permit durations for reviewed permits

Permittee	Previous renewal date	Next renewal date	Duration (years)
<u>Group A: renewals 7/00-6/01</u>			
App. Power: Mountaineer	2/15/96	2/14/01	5
DuPont: Belle	2/24/93	2/23/01	8
Malden PSD	6/22/95	6/21/01	6
Weirton, City of	7/28/95	12/31/00	6
Wheeling-Pitt. Steel: Follansbee	4/24/95	4/23/01	6
<u>Group B: renewals 7/01-6/02</u>			
Clearon/Olin Chemicals	11/2/93	11/1/01	8
Grafton, City of	11/1/94	10/31/01	7
TOW Maintenance & Cleaning	1/26/98	1/25/02	4
VEPCO: Mount Storm	10/21/97	10/20/01	4
<u>Group C: renewals 7/02-6/03</u>			
Bayer	12/28/98	12/27/02	4
Century Aluminum	7/30/99	7/29/02	3
DuPont: Washington Works	9/30/94	9/29/02	8
Greenbrier County PSD No. 2	5/19/99	5/18/03	4
Summersville, Town of	6/30/99	6/29/03	4
Welch, City of	4/5/96	4/4/03	7
<u>Group D: renewals 7/03-6/04</u>			
Crab Orchard/Macarthur PSD	6/30/00	6/29/04	4
Morgantown Energy Associates	9/25/95	9/24/03	8
<u>Group E: renewals 7/04-6/05</u>			
Moundsville, City of	12/15/95	12/14/00	5
UCAR Carbon	4/24/00	4/23/04	4

Note: Previous renewal date is the most recent date before late 2000 when the permit was renewed. Next renewal date is either the original expiration date of the permit or the date to which the permit has been extended because of the transition to the Watershed Management Framework. City of Weirton's permit duration—about five years and five months—is rounded up and reported as six years in the table.

5.2 Antidegradation

The CWA's antidegradation provisions are meant to be an integral component of the permitting process: They ensure that clean water bodies stay clean, and that water quality is not degraded unless clear economic or social benefits outweigh the benefits of clean water. Antidegradation policies may affect whether or not permits are issued, and may also affect discharge limits of those that are issued. Antidegradation is to be implemented at the state level by establishing an implementation policy (40 CFR 131.12). To date, WV has not established such a policy, and the CWA's antidegradation provisions remain unimplemented.

An implementation policy would require OWR, when reviewing a permit application or renewal, to determine whether or not the proposed permitted discharges will degrade the receiving water body. Because all pollutant discharges degrade the receiving water body at least to some degree, clearly defining the word "degrade" is an important part of an antidegradation implementation policy.

In the past, OWR has made minimal efforts to evaluate degradation expected from permitted discharges. The fact sheet for Appalachian Power's Mountaineer Plant contains the following statement: "Due to the nature of these discharges it is the opinion of this permit writer that these discharges will not cause

degradation of the high quality receiving stream.” (DEP, 1995g, p.7) Fact sheets for TOW Maintenance & Cleaning (DEP, Undated(c)) and VEPCO’s Mount Storm facility (DEP, 1997e) contain similar language.

These statements seem to be based on OWR’s premise that renewed permits that maintain discharge limits at past levels will not cause additional degradation. This premise, however, does not address the degradation taking place as a result of the facility’s discharge, in comparison to no discharge at all. In fact, no fact sheets, permits, or other material in the permit files explain what is meant by “degradation” or demonstrate any calculations that quantify the degree of degradation to receiving water bodies expected from permitted discharges. Table 4 illustrates that these calculations have not been performed.

Table 4: Antidegradation reviews for reviewed permits

Permittee	Calculation performed to determine degradation	Antidegradation review performed if required
MUNICIPAL		
Crab Orchard/Macarthur PSD	No	Unknown
Grafton, City of	No	Unknown
Greenbrier County PSD No. 2	No	Unknown
Malden PSD	No	Unknown
Moundsville, City of	No	Unknown
Summersville, Town of	No	Unknown
Weirton, City of	No	Unknown
Welch, City of	No	Unknown
INDUSTRIAL		
App. Power: Mountaineer	No	Unknown
Bayer	No	Unknown
Century Aluminum	No	Unknown
Clearon/Olin Chemicals	No	Unknown
DuPont: Belle	No	Unknown
DuPont: Washington Works	No	Unknown
Morgantown Energy Associates	No	Unknown
TOW Maintenance & Cleaning	No	Unknown
UCAR Carbon	No	Unknown
VEPCO: Mount Storm	No	Unknown
Wheeling-Pitt. Steel: Follansbee	No	Unknown

Note: “Calculation performed to determine degradation” column would be marked “Yes” if permit file contains documentation of a calculation that quantifies the amount of degradation that the permit would cause to the receiving water body. “Antidegradation review performed if required” column would be marked “Yes” if calculation was performed and required a review to be conducted, and the review was performed.

Once OWR determines that facilities will degrade certain receiving water bodies, the agency must perform antidegradation reviews. These reviews balance the economic and social benefits of allowing the discharges against the degradation of the receiving water body. As shown in Table 4, it is impossible to know if required antidegradation reviews have been conducted because the degradation calculations have not been performed.

WV’s antidegradation implementation policy is currently being debated by the state legislature. EPA has pledged to promulgate a policy if the state-approved policy does not meet federal standards. Once it is finalized, the state’s new policy must clearly define degradation, a procedure for measuring whether or not discharges degrade receiving water bodies, and a process for performing antidegradation reviews when they are required. These will be among the first steps OWR takes with every permit issuance and renewal; its calculations and reviews will be of great interest to participants in the permitting process.

5.3 Effluent limits

Effluent limits are the most important aspect of permits: They set the maximum allowable pollutant levels that can be discharged from permitted facilities. Limits are set for individual pollutants discharged from

each pipe, or outlet, and are also often set for whole effluent toxicity (WET), a measure of the toxicity of the discharge as a whole.

Several calculations and decisions come together to determine effluent limits, based not only on the CWA and federal and state regulations, but also on EPA guidance and DEP policies as well (EPA, 1991 and 1996; DEP 1993a, 1997a, and 2000a). Citizen participants need to assure themselves that provisions of the CWA and its regulations, such as reasonable potential analyses, are enforced. And because limit-relaxing measures such as mixing zones, variances, and compliance schedules are not infrequently used, citizens also need to be able to satisfy themselves that their use is justified. Reasonable potential analyses, mixing zones, variances, and compliance schedules are therefore highlighted in this section on effluent limits.

Reasonable potential analyses

Technology-based effluent limits establish the minimum level of treatment that must be met by all facilities in every industry and by every municipal sewage treatment plant. EPA regulations contain guidelines for developing technology-based limits for a wide range of industries. For example, regulations at 40 CFR 423 contain guidelines for steam electric power generation sources; permit writers used these guidelines to generate limits for the three power plant permits under review.

Technology-based limits set minimum standards and do not account for characteristics of receiving water bodies or other nearby pollutant loads. Therefore, they are not always stringent enough to ensure that water quality standards⁹ in receiving water bodies are met.

Federal regulations require that OWR assess all effluents to determine whether more stringent WQBELs are needed. WQBELs are necessary if the discharge, with the application of technology-based limits, “will cause, have the *reasonable potential* to cause, or contribute to an excursion above *any* State water quality standard” (40 CFR 122.44, emphasis added). “Reasonable potential” is a key concept here: Discharges must be assigned stricter WQBELs not only if they cause or contribute to excursions, but also if they have the reasonable potential to cause excursions above water quality standards.

EPA guidance explains this concept of reasonable potential in detail, and provides a statistical method to determine reasonable potential based on historical effluent monitoring data (EPA, 1991). Although the regulations quoted above require that reasonable potential be used as a basis for determining whether WQBELs are needed for “any” pollutant—toxic, conventional, and non-conventional—OWR generally only performs these analyses for toxics.

In fact, for none of the nineteen reviewed permits did OWR perform reasonable potential analyses for all required pollutants.¹⁰ As shown in Table 5, no reviewed permits have had all required reasonable potential analyses performed. Table 5 also shows that it is impossible to confirm if all required WQBELs have been issued when the required reasonable potential analyses have not been conducted. It is possible that performing all required reasonable potential analyses would lower discharge limits for some permits.

⁹ In accordance with the CWA, the DEP assigns water quality standards for a wide range of pollutants to each water body. One of the primary functions of these standards is to help calculate permit limits. Water quality standards are also used to compare with instream monitoring data to determine whether or not a water body is unacceptably polluted.

¹⁰ Pollutants do not require reasonable potential analyses if WQBELs are automatically assigned. For example, fecal coliform limits are always stricter than water quality-based, and municipal pollutants that affect dissolved oxygen levels in receiving streams are automatically water quality-based.

Table 5: Reasonable potential analyses and WQBELs for reviewed permits

Permittee	Reasonable potential analyses		All required WQBELs issued
	One or more required	All required were conducted	
MUNICIPAL			
Crab Orchard/Macarthur PSD	Yes	No	Unknown
Grafton, City of	Yes	No	Unknown
Greenbrier County PSD No. 2	Yes	No	Unknown
Malden PSD	Yes	No	Unknown
Moundsville, City of	Yes	No	Unknown
Summersville, Town of	Yes	No	Unknown
Weirton, City of	Yes	No	Unknown
Welch, City of	Yes	No	Unknown
INDUSTRIAL			
App. Power: Mountaineer	Yes	No	Unknown
Bayer	Yes	No	Unknown
Century Aluminum	Yes	No	Unknown
Clearon/Olin Chemicals	Yes	No	Unknown
DuPont: Belle	Yes	No	Unknown
DuPont: Washington Works	Yes	No	Unknown
Morgantown Energy Associates	Yes	No	Unknown
TOW Maintenance & Cleaning	Yes	No	Unknown
UCAR Carbon	Yes	No	Unknown
VEPCO: Mount Storm	Yes	No	Unknown
Wheeling-Pitt. Steel: Follansbee	Yes	No	Unknown

Uncertainty about whether OWR assigns appropriate discharge limits also arises from comments in fact sheets. According to Clearon/Olin’s fact sheet, WET effluent limits are not assigned because if they were assigned, the discharger would consistently violate the limits:

There has been a long standing problem with the effluent from this facility. It is consistently in compliance with its effluent limits, but this is because the Bioassay [WET test] is presently a monitor only requirement. If a 2.5 TU_a [acute toxic unit] limit was imposed, they would have a problem meeting the limit... (DEP, 1993d, p. 3)

In other words, monitoring data suggest that if OWR were to impose a WET limit of 2.5 TU_a—as required by OWR’s policy at the time (DEP, 1993a)— Clearon/Olin would consistently violate the limit. The compliance schedule included with the permit does not require Clearon/Olin to fix this situation in the future; therefore, the permittee has no incentive to clean up its discharge.

Mixing zones

Mixing zones are portions of receiving water bodies that surround discharge pipes; water quality standards for toxic pollutants may by law be exceeded in these zones if a permittee applies for a mixing zone and it is approved by OWR. Without mixing zones, WQBELs for toxic pollutants would be considerably stricter.

The CWA does not require state permitting agencies such as OWR to allow mixing zones; however, agencies may allow them when they are sized so as to prevent lethality to aquatic organisms and to minimize human health impacts. OWR adopted guidance on mixing zone implementation in 1997 (DEP, 1997a), several years after EPA’s guidance was published (EPA, 1991).

The mixing zones column of Table 6 is marked “Yes” in two situations: when one or more permit limits are affected by a mixing zone, or when the permit requires data collection for use in determining mixing zone boundaries in the future. As shown in this table, mixing zones are, or will be, a factor in effluent

limits for more than one-half of the reviewed industrial permits and for one of the reviewed municipal permits.

Mixing zones are an important aspect of permits and deserve special attention by people and organizations interested in maintaining water quality standards. Recommendations in Section 6 will help the public become more educated on state mixing zone policies and on specific mixing zones for permits of concern.

Table 6: Mixing zones, variances, and compliance schedules for reviewed permits

Permittee	Mixing zones	Variances	Compliance schedules
MUNICIPAL			
Crab Orchard/Macarthur PSD	No	No	No
Grafton, City of	No	No	Yes
Greenbrier County PSD No. 2	No	No	No
Malden PSD	No	No	Yes
Moundsville, City of	No	No	No
Summersville, Town of	No	No	No
Weirton, City of	Yes	No	Yes
Welch, City of	No	No	No
INDUSTRIAL			
App. Power: Mountaineer	No	No	No
Bayer	Yes	No	No
Century Aluminum	Yes	No	No
Clearon/Olin Chemicals	No	No	Yes
DuPont: Belle	Yes	Yes	No
DuPont: Washington Works	Yes	No	Yes
Morgantown Energy Associates	No	Yes	No
TOW Maintenance & Cleaning	Yes	No	No
UCAR Carbon	No	No	No
VEPCO: Mount Storm	No	Yes	No
Wheeling-Pitt. Steel: Follansbee	Yes	Yes	No

Note: "Mixing zones" column marked "Yes" if one or more mixing zones affect current effluent limits, or if monitoring is required for use in determining mixing zone boundaries. Complete mix situations are not included for the purposes of this table. "Variances" column marked "Yes" if one or more variances have been granted that affect current effluent limits. "Compliance schedules" column marked "Yes" if most recent permit contains one or more compliance schedules at the time of permit issuance.

Variances

The CWA provides several mechanisms for granting permittee requests for variances, which typically allow less stringent discharge limits to be issued. Variances to technology-based effluent limits can be granted for economic factors (CWA Section 301(c)), localized environmental factors (CWA Section 301(g)), fundamentally different factors (CWA Section 301(n)), and in other situations as well. Variances to water quality-based effluent limits can be granted through site-specific water quality criteria modifications (CWA Section 304(a)), designated use reclassifications (40 CFR 131.10(j)), or water quality standards variances (40 CFR 131.10(g)).

Fact sheets mention variances that affect permitted discharge limits. Table 6 shows that four of the eleven industrial facilities under review have obtained variances. The state EQB makes variance decisions at public hearings. Even though these decisions are made by EQB, OWR can play an important role in communicating information about variances and how they affect permit limits, as detailed in Section 6.

Compliance schedules

Permits generally require discharge limits to be met on the effective date, which is usually one month after the permit issuance date. Sometimes, permits contain compliance schedules that allow discharge

limits to be met at some later date. These compliance schedules are usually issued in cases when a new technology must be installed to meet discharge limits; they provide a schedule with milestones for the permittee to meet. Compliance schedules are also used in other situations, such as when requiring additional monitoring, the removal of outlets or temporary sewer overflows, or the filing of reports. Violations of compliance schedules are considered violations of the permit.

As shown in Table 6, five of the nineteen permits under review incorporate compliance schedules. Additional compliance schedules have been issued by OWR through administrative orders for some facilities under review; these compliance schedules are not considered in Table 6. Again, the public can play a role when compliance schedules are granted, and can also help monitor whether or not they are met.

As illustrated in this section on effluent limits, several factors come together to determine these limits: reasonable potential analyses should be used to determine whether stricter WQBELs must be assigned, numeric limits may be relaxed through the use of mixing zones and variances, and compliance with these limits may not take place until well into the future through the use of compliance schedules. Information about why they are used, how they are justified, and how they impact effluent limits is crucial to enable the public to understand and participate in these key permitting decisions.

5.4 Modifications

Permits are often modified between renewal dates. Minor modifications are used to correct typographical errors, to require more frequent monitoring or reporting, and to accomplish several other types of non-substantive changes (40 CFR 122.63, 47 CSR 10.9.5). All other modifications are defined as major and require new fact sheets and draft modifications that are subject to public notice and comment (40 CFR 122.62, 47 CSR 10.9.2.b).

For the nineteen reviewed permittees, a total of 37 modifications were approved by OWR after the most recent issuance of their permits. Several of these modifications are clearly minor modifications; for example, they correct a typographical error or incorporate a change in ownership of the facility. But most reviewed modifications are major modifications. These modifications, among other things, make discharge limits less stringent, reduce monitoring frequencies, and allow major physical alterations to the permitted facilities.

However, only one of the 37 modifications shows evidence that a fact sheet was developed and that a public comment period was held: modification number 10 for DuPont's Washington Works facility (DEP, 2000e). Substantive modifications that relax discharge limits or monitoring frequencies, or that allow major physical alterations to permitted facilities, deserve the same level of public scrutiny as permit applications and renewals. Section 6 contains a recommendation that addresses this concern.

5.5 Monitoring

All NPDES permits contain monitoring requirements in addition to discharge limitations. Monitoring requirements specify the frequency with which the permittee is to monitor each pollutant, the sampling methods, the locations where samples are to be taken, the analytical techniques, and the frequency with which monitoring data must be submitted to OWR and EPA. Typically, monitoring data are submitted monthly.

According to EPA guidance, monitoring frequency is determined by permit writers on a case-by-case basis, but decisions should be set forth in each permit's fact sheet (EPA, 1996). This flexibility allows

permit writers to choose a frequency that is sufficient to yield data that are representative of the monitored activity. At the same time, monitoring should only be as frequent as necessary so as to minimize economic burdens on permittees. Monitoring frequencies may vary based on a facility’s size and past compliance record, and may also be more frequent for pollutants of concern.

Fact sheets contain a section called “Rationale for Proposed Effluent Limitations and Monitoring Requirements.” As the title implies, permit writers use this section to justify the monitoring requirements proposed in draft permits. But for the reviewed permits, monitoring requirements are never clearly justified for all pollutants. All nineteen permits are therefore marked “No” in Table 7.

Table 7: Monitoring frequency justifications for reviewed permits

Permittee	All monitoring frequencies justified in fact sheet
<u>MUNICIPAL</u>	
Crab Orchard/Macarthur PSD	No
Grafton, City of	No
Greenbrier County PSD No. 2	No
Malden PSD	No
Moundsville, City of	No
Summersville, Town of	No
Weirton, City of	No
Welch, City of	No
<u>INDUSTRIAL</u>	
App. Power: Mountaineer	No
Bayer	No
Century Aluminum	No
Clearon/Olin Chemicals	No
DuPont: Belle	No
DuPont: Washington Works	No
Morgantown Energy Associates	No
TOW Maintenance & Cleaning	No
UCAR Carbon	No
VEPCO: Mount Storm	No
Wheeling-Pitt. Steel: Follansbee	No

There are some cases where monitoring requirements are at least discussed in fact sheets. For example, the 1995 fact sheet for the City of Weirton’s sewage treatment facility (DEP, 1995f) justifies annual WET monitoring by referring to OWR’s Toxics Strategy (DEP, 1993a), which was used to guide permit development during this time period. The fact sheet also discusses monitoring frequencies for conventional pollutants, temperature, toxic metals, and organics. However, even this relatively comprehensive discussion of monitoring does not provide a solid justification for each frequency. For example, it does not explain why annual monitoring of toxic organics is sufficient to document the presence of those pollutants in the system.

If OWR uses standard monitoring frequencies or rules of thumb for certain pollutants or types of facilities, fact sheets should inform the public by referring to this guidance as justification for monitoring frequencies. As recommended in Section 6, fact sheets should go beyond stating what the frequencies are, and should explain why these frequencies are sufficient or refer to explanatory guidance.

5.6 Compliance

Permits are only effective if dischargers comply with them. In order to evaluate compliance with discharge limits, permittees are required to monitor their discharges and send results to OWR on standardized forms called discharge monitoring reports (DMRs). Compliance data submitted on DMRs

are entered into a national computer database called the Permit Compliance System (PCS). The PCS can be searched over the Internet by anyone interested in evaluating facilities' compliance records (EPA, 2001).

Compliance records of major facilities are also tracked on EPA reports called Quarterly Non-Compliance Reports (QNCRs), which are available to the public through Freedom of Information Act (FOIA) requests. These documents show which facilities are out of compliance with one or more of several key permit conditions; DEP is expected to rapidly initiate enforcement actions against at least the most significant violations that appear on the QNCR.

QNCRs are limited in their usefulness to the public because they do not show all instances of non-compliance. For example, there are two types of discharge limits—monthly average and daily maximum limits—but according to federal regulations, only facilities that persistently violate monthly average limits, that exceed these limits by large amounts, or that fail to meet compliance schedules or certain other permit conditions are included on QNCRs (40 CFR 123.45). Violations of daily maximum limits do not qualify for inclusion. The QNCR gives a concise look at major violations; people interested in facilities' full compliance records would be advised to directly access DMRs or to perform PCS queries.

Table 8 demonstrates that violations occur frequently. At least eleven of the nineteen reviewed facilities had at least three numeric violations in a recent two-year period, and seven reviewed facilities appeared on the QNCR during the same period.

A further complication arises in assessing permit compliance when DEP removes permit limits for facilities that routinely exceed them. This situation was encountered for the City of Weirton's residual chlorine limit and for DuPont's fecal coliform and WET limits at their Belle facility. In these cases, DEP replaced consistently violated numeric limits with "monitor only" requirements, while instituting compliance schedules designed to eventually lead to compliance with numeric limits.

In these situations, facilities are still required to monitor these discharges, but the monitoring data are no longer compared with discharge limits and violations are no longer documented. DEP justifies this practice as a reasonable way to gain long-term compliance with necessary limits. But the practice does a disservice to people or organizations interested in assessing facilities' true compliance, because violations of original limits are no longer recorded.

5.7 Enforcement

When faced with non-compliance, DEP has a number of enforcement options at its disposal. Generally, enforcement begins with the most benign response and is escalated as necessary. Enforcement actions include, among other things, informal requests to comply, notices of violation, administrative orders and fines, civil lawsuits, and criminal prosecutions. Table 9 shows which permittees were subject to three typical types of agency enforcement actions: notices of violation, administrative orders, and civil lawsuits.

Table 8: Compliance with reviewed permits (April 1998 through March 2000)

Permittee	Three or more violations	Appears on QNCR
MUNICIPAL		
Crab Orchard/Macarthur PSD	Unknown	Yes
Grafton, City of	Yes	Yes
Greenbrier County PSD No. 2	Unknown	No
Malden PSD	Yes	Yes
Moundsville, City of	Yes	No
Summersville, Town of	Yes	Yes
Weirton, City of	Yes	No
Welch, City of	Yes	Yes
INDUSTRIAL		
App. Power: Mountaineer	No	No
Bayer	Yes	No
Century Aluminum	No	No
Clearon/Olin Chemicals	Yes	No
DuPont: Belle	Yes	No
DuPont: Washington Works	Yes	Yes
Morgantown Energy Associates	No	No
TOW Maintenance & Cleaning	No	No
UCAR Carbon	No	No
VEPCO: Mount Storm	No	No
Wheeling-Pitt. Steel: Follansbee	Yes	Yes

Note: Facilities are marked "Yes" in "Three or more violations" column one if three or more violations of monthly average or daily maximum limits occurred in the specified time period, based on online PCS queries performed on February 4, 2001. Facilities are marked "Unknown" if PCS queries did not include compliance information for the entire time period. Facilities are marked "Yes" in "Appears on QNCR" column if they appear as non-compliant in one or more QNCRs for the specified time period (EPA, 1998a, b, c, 1999a, b, c, d, and 2000).

Notices of violation

Notices of violation are letters that describe one or more violations and that ask the permittees to respond in writing regarding how they will fix the problem. They do not assess monetary penalties. Table 9 shows that several of the reviewed permits were the subject of notices of violation in the past five years. For example, a notice of violation issued by DEP to Morgantown Energy Associates describes two violations found during a routine river patrol on the Monongahela River: a large discharge from a stormwater outfall during dry weather, and a high total residual chlorine measurement (DEP, 1997c). The notice allows fifteen working days for the permittee to respond regarding remediation of these violations.

Administrative orders

Administrative orders are more serious enforcement actions. They include two sections: The "Findings of Fact" section details one or more violations, and the "Order for Compliance" section informs the permittee what must be done to address the violations. For example, DEP issued administrative order 4913 to the Malden PSD (DEP, 2000d), which lists more than sixty permit violations and orders the permittee to submit a written plan of action for attaining future compliance with its discharge limits. As shown in Table 9, several other reviewed permits were also subject to administrative orders.

Three administrative orders documented in Table 9 include fines for past violations, and all three fines were reduced by 75% from their original calculated values. These include order 4008 for TOW Maintenance & Cleaning, which lists eleven violations with a total assessment of \$45,000, reduced to \$11,250 (DEP, 1998c); order 3870 for Wheeling-Pittsburgh Steel, which calculates a penalty of \$432,000 for 66 violations, but reduces the penalty to \$108,000 (DEP, 1997d); and order 3985, also for Wheeling-Pittsburgh Steel, which calculates a fine of \$21,000, but reduces it to \$5,250 (DEP, 1998g).

Table 9: Enforcement actions taken for reviewed permits (1995 through 2000)

Permittee	DEP enforcement			Public enforcement through lawsuit
	Notice of violation	Administrative order	Civil lawsuit	
MUNICIPAL				
Crab Orchard/Macarthur PSD	No	No	Yes	No
Grafton, City of	No	No	Yes	Yes
Greenbrier County PSD No. 2	No	No	No	No
Malden PSD	Yes	Yes	No	No
Moundsville, City of	No	No	No	No
Summersville, Town of	No	No	No	No
Weirton, City of	No	Yes	Yes	Yes
Welch, City of	No	No	No	No
INDUSTRIAL				
App. Power: Mountaineer	Yes	No	No	No
Bayer	No	No	No	No
Century Aluminum	No	No	No	No
Clearon/Olin Chemicals	Yes	No	No	No
DuPont: Belle	No	Yes	No	No
DuPont: Washington Works	Yes	No	No	No
Morgantown Energy Associates	Yes	No	No	No
TOW Maintenance & Cleaning	No	Yes	No	No
UCAR Carbon	No	No	No	No
VEPCO: Mount Storm	No	No	No	No
Wheeling-Pitt. Steel: Follansbee	No	Yes	Yes	No

Note: Facilities are marked "Yes" if one or more of the specified type of enforcement action was taken in the specified time period, based on copies of enforcement actions or references to enforcement actions in permit file. Therefore, this table may understate the number of enforcement actions taken. Administrative orders include only those orders directly related to violations of numeric limits. Public enforcement through lawsuit marked "Yes" if copy of sixty-day notice of intent to file suit found in permit file.

Reducing fines in such a manner may help OWR avoid civil lawsuits, thereby saving resources that would otherwise be spent preparing for these lawsuits. Settling compliance problems with administrative fines also guarantees that the fines are used to fund the permit program, because when civil lawsuits are pursued, fines may be allocated elsewhere. But as illustrated in the three cases above, a 75% reduction in fines can save permittees anywhere from a few thousand dollars to several hundred thousand dollars. A more rational system of determining administrative fines would account for OWR resources saved by avoiding civil lawsuits.

Stipulated penalties for future permit violations are also sometimes included in administrative orders. For example, administrative order 3357 forces Century Aluminum to pay \$250 for all future violations, without question, until its 1999 permit renewal (DEP, 1993e). Century Aluminum paid these penalties for a series of violations without any indication that they were fixing underlying problems that led to the permit violations. In 1999, its permit was renewed and these penalties were no longer required, leaving the original problem unaddressed at a cost of only several thousand dollars to Century Aluminum. Administrative fines and stipulated penalties will not deter future non-compliance if they are so small that permittees consider them a token payment for polluting and part of the cost of doing business.

Administrative orders are also sometimes used to temporarily weaken, rather than enforce, existing permits. For example, DuPont's facility in Belle received two administrative orders that, rather than initiating enforcement for persistent non-compliance, changed problematic permit limits to "monitor only." The first, administrative order 3364, was issued in response to DuPont's persistent non-compliance with fecal coliform limits (DEP, 1993f). The order changed these limits to "monitor only" and instituted a compliance schedule that gave the facility two years to meet its fecal coliform limits. The second,

administrative order 4043, cites thirteen WET violations (DEP, 1998d). It changed DuPont's WET limit to "monitor only" and instituted a compliance schedule for meeting these limits.

Administrative orders are sometimes similarly used to weaken permit limits while data are collected to implement new DEP policies. For example, DuPont's Washington Works facility received administrative order 4019 that changed its WQBELs to less stringent technology-based limits while new mixing zone data were collected (DEP, 1998e). Once collected, these new data are to be used to revise the limits. Meanwhile, for an extended period of time, the facility's limits were no longer based on maintaining water quality standards in the receiving water body.

Administrative orders that weaken discharge limits perform the same function as major permit modifications. Information about such orders should therefore be provided to the public; opportunities for public comment should also be provided.

Civil lawsuits

DEP can also file civil lawsuits against persistent violators. If successful or settled, lawsuits usually result in monetary penalties. As shown in Table 9, several reviewed permits were subject to civil lawsuits filed by DEP. For example, OWR filed a civil action against Wheeling-Pittsburgh Steel's Follansbee plant, which outlined several violations from 1995 through 1997 (DEP, 1998f). The consent order that settled the case called for the company to pay a civil penalty of \$87,250 and to pay stipulated penalties of \$1,500 per violation through the end of 1998.

While penalty amounts in civil lawsuits and administrative orders may seem large, they are in fact small compared with what the CWA allows. Federal regulations state that DEP must have the ability to recover civil penalties of at least \$5,000 per day for each violation (40 CFR 123.27). Faced with tight budgets, DEP's willingness to reduce penalties by 75% and to negotiate small stipulated penalties may unnecessarily reduce its available funding, in addition to providing poor incentives for repeat violators to invest in cleaning up their discharges.

The public role in enforcement

As required by federal regulations, DEP encourages public reporting of violations and makes information available to the public on how to report violations (40 CFR 123.26). Complaints can be submitted to DEP field offices by phone or in writing, and provisions are made for the filing of anonymous complaints (DEP, Undated(a)). Field offices attempt to investigate complaints within 24 hours, but investigations sometimes take from two to four weeks. DEP provides follow-up responses to complaints when requested.

If this avenue for public involvement in enforcement does not produce satisfactory results, anyone may bring a civil enforcement action against a permittee that they allege to be in violation of an effluent limit (CWA Section 505). The final column of Table 9 shows that two facilities were the subjects of direct enforcement actions by citizens' groups in the last five years.

Citizen suits are important aspects of the Act, as citizen pressure can help to balance permittee pressure and can give DEP incentive to step in with enforcement actions of its own. For example, civil actions were filed by DEP against the Cities of Grafton and Weirton soon after the American Canoe Association filed sixty-day notices of intent to sue regarding permit violations. These actions demonstrate that citizen monitoring of compliance and enforcement can play a key role in pushing DEP to take action.

6. RECOMMENDATIONS

This analysis of nineteen randomly selected permits highlights many aspects of OWR's permitting process that are important for public participation. This review demonstrates both a need and a responsibility for OWR to improve the flow of information to citizens and organizations interested in participating in the NPDES permitting process. Recommendations for OWR fall into three categories:

- Improving strategies for public notice,
- Providing easy and comprehensive access to permit-related information, and
- Overcoming other obstacles to public participation.

Several specific recommendations are made within each of these areas.

6.1 *Improving strategies for public notice*

As described in Section 4, OWR already notifies the public of impending permit decisions by requiring permittees to publish public notices in local newspapers, by making subscriptions available to its *Public Notice Bulletin*, and by maintaining mailing lists. The following recommendations address additional steps that OWR can take to ensure that more people are informed of permitting decisions.

- **Widely publicize watershed-based mailing lists.** OWR should concentrate more heavily on using watershed-based mailing lists and e-mail lists to provide public notices directly to interested people and organizations. These lists should be well advertised. OWR could make use of watershed organizations' mailing lists as an initial foundation. Implementing such a system may require strengthened coordination between the permitting branch of OWR and the Watershed Basin Coordinator, who already maintains lists for use in Watershed Management Framework-related activities. EQB hearings that affect particular watersheds should also be advertised through these lists.
- **Publish the *Public Notice Bulletin* more frequently.** DEP periodically publishes its *Public Notice Bulletin*, which lists all NPDES permits that are open for comment. However, because it is not published frequently enough, comment periods often conclude before they are announced in this publication. Increasing the frequency of publication, and advertising the publication more aggressively, would make the *Public Notice Bulletin* more useful. Also, to allow the earliest possible public participation in the permitting process, the bulletin should list permits for which applications have been received, but for which draft permits have not yet been issued.
- **Automatically send public notices directly to watershed groups.** OWR should automatically send public notices directly to watershed groups for permits within their watersheds, whether or not the groups have signed up for watershed-based mailing lists. This would ensure that these groups learn about local permits with minimal effort. DEP already maintains a watershed group mailing list through the Stream Partners Program; this list could be used directly by OWR.
- **Publish display advertisements for decisions on major permits.** Public notices are typically only published in the Classified section; many people are likely to miss them. More prominent advertisements for decisions on major permits would increase the chance that people would learn about these most important permitting decisions.
- **Clearly document rationales for classifying modifications as major or minor, and promote public participation in major modification decisions.** While most reviewed modifications were major, permit files only document one modification decision that underwent public notice. OWR should use the strategies documented above to promote active public involvement in major modification decisions.

6.2 *Providing easy and comprehensive access to permit-related information*

Once citizens and organizations are aware of permitting decisions, they require information in order to understand permits. OWR already partially satisfies this need by developing fact sheets, posting certain documents on the Web, and responding to FOIA requests. But OWR can take additional steps that will make fact sheets more useful to the public, take better advantage of its Web site, and streamline the FOIA process.

Making fact sheets more useful to the public

- **More clearly document monitoring frequencies.** Monitoring frequencies for each pollutant should be well justified in fact sheets. Fact sheets should go beyond stating what the frequencies are, and should say why these frequencies are sufficient. Whenever possible, justifications should refer to state or federal guidance, policies, regulations, and laws.
- **Include additional compliance and enforcement information.** Fact sheets should better document past effluent monitoring data by including—for each pollutant and for each outlet—the permitted limit, the frequency of violation, and the time period over which the monitoring took place. Fact sheets should also clearly document all enforcement actions taken by DEP, EPA, and citizens during the previous permit period. When fines were issued, the fact sheet should document penalty amounts for each instance of non-compliance, the method used to calculate these penalties, and the amounts paid.
- **Document antidegradation calculations and reviews.** Calculations that justify whether or not discharges degrade water quality should be documented in fact sheets. Full antidegradation reviews, when required, should also be documented.
- **Document reasonable potential analyses.** Reasonable potential analyses should be conducted for all required pollutants, not just for toxics, and should be carefully documented in fact sheets.
- **Document mixing zones and variances.** When mixing zones and variances are used to create less stringent effluent limits, they should be well documented in fact sheets. When draft permits require data collection for the future determination of mixing zones, this should also be documented.
- **Indicate where DEP has searched for receiving water data.** Fact sheets do not currently indicate if DEP has solicited monitoring data for receiving water bodies from sources other than the permittee. Watershed organizations and other agencies may have collected these data, and may be interested in designing monitoring programs related to the needs of permittees if they are aware of these needs and have confidence that their data will be used in the process.
- **Include references to general background information.** In addition to the permit-specific information detailed above, all fact sheets should include references to background on relevant laws, regulations, and guidance that would help the public understand the most fundamental principles of the CWA and the NPDES process. This information may also help permittees themselves, who are not always fully conversant with the regulations and policies that guide permit decisions. References to documents—and instructions for acquiring documents—should be included for at least the following topics: water quality standards, antidegradation, reasonable potential analyses, determining technology-based and water quality-based effluent limits, mixing zones, variances, compliance schedules, and compliance and enforcement.

Taking better advantage of OWR's Web site

OWR's Web site already includes several useful documents and search capabilities that aid public participation in the permitting process. Many of these features have been added recently through the implementation of the agency's technology improvement project. However, several additional steps can be taken that are specifically tailored to facilitating public participation:

- **Package public participation–related information on a single page.** OWR has done a good job of packaging permit-related information on its Web site for use by permittees. The agency can similarly package information for use by the public. A single page, perhaps called “Public Participation,” can be added to OWR’s Web site and can provide a point of entry for those interested in engaging in the permitting process. This page should provide links to the information included in the following recommendations.
- **Post public notice–related information.** OWR’s Web site should allow people to sign up for watershed-based mailing lists and e-mail lists, and should also allow people to sign up for subscriptions to the *Public Notice Bulletin*. In addition, the Web site should directly post active public notices.
- **Post permit-specific information.** At a minimum, draft and final permits, fact sheets, and copies of reasonable potential analyses should be posted on OWR’s Web site for all permits. In addition, notices of violation, administrative orders, and civil and criminal court actions could also be posted. Groundwater protection plans, storm water pollution prevention plans, and other documents submitted by permittees in fulfillment of permit conditions may also be made available online, especially if permits require that these documents be submitted to OWR as portable document format (PDF) computer files.
- **Post general CWA and NPDES information.** State and federal documents that relate to the CWA and the NPDES process, as described in the related recommendation above, should be easily available for download from OWR’s web site. QNCRs should also be posted on OWR’s Web site.
- **Improve OWR’s online Permit Information System.** OWR’s current online Permit Information System allows the public to query OWR’s permit database by permit name, permit number, county, or quad. While this is a good first step, search results contain very little information about permits. Results should include at least the following: most recent issue, expiration, and extended date; pollutants covered in permit; permitted limits; and information about compliance and enforcement. Watershed-based queries should also be implemented, and should be available for small watersheds.

Streamlining the FOIA process

- **Provide NPDES searches by watershed for small watersheds.** Watershed organizations are often interested in permits within their watershed boundaries; therefore, they will want an exhaustive list of these permits. DEP should be able to search its permit database not just by eight-digit hydrologic unit codes (HUCs), but by 11-digit HUCs as well. Permit searches should automatically include all NPDES permits issued by DEP, whether they are issued by OWR or OMR. It may not be difficult to provide maps of permitted facilities by watershed as well.
- **Provide default information about NPDES permits.** People and organizations typically want certain basic permit information, such as the name of the permittee and the facility; the permit ID; the location of all outlets; the SIC code; and the issue, expire, and extended date; and the effluent limits. Unless asked for something different, DEP should provide this information automatically for all permits when satisfying FOIA requests.

6.3 Overcoming other obstacles to public participation

Stimulating effective public participation involves more than simply notifying the public of impending decisions and making information available. Because most people are busy and can devote only a small amount of time to permitting issues, OWR can help citizens participate by ensuring that the CWA is fully implemented. This would lessen the burden on the public to research the Act and would allow people to concentrate instead on aspects of the permitting process that are typically relevant for public comment. Recommendations include:

- **When employing compliance schedules, leave original numeric limits in place.** Changing numeric limits to “monitor only” when compliance schedules are in effect serves to mask persistent violations, makes it more difficult for the public to learn about facilities’ true compliance records, and eliminates the incentive for facilities to promptly upgrade as required.
- **Publish an explicit policy that assesses consistent and stiff penalties for violations.** An explicit policy would detail how penalties are assessed, in what situations they are reduced using settlement factors, and by how much. The use of settlement factors should be minimized, and penalties should be high enough to deter future non-compliance.
- **Adopt a strong antidegradation implementation policy.** Although the state’s antidegradation implementation policy is under review by the legislature as this report is released, OWR is a key participant in this discussion. A strong antidegradation implementation policy will ensure that the state’s clean water bodies stay clean, unless additional pollution is well justified by economic and social benefits. Such a policy should have a strong public participation component, which will allow antidegradation analyses to incorporate a range of local concerns.
- **Conduct reasonable potential analyses for all pollutants.** As written in the federal regulations, reasonable potential analyses should be conducted for all pollutants, not only for toxics. These analyses should be available for review when draft permits are up for public comment. When permit writers use reasonable potential analyses for the first time for a particular permit, old WQBELs should not be discarded while new WQBELs are developed.
- **Provide additional support to watershed groups for permit-related activities.** DEP’s Stream Partners Program, which already provides small grants to watershed organizations across West Virginia, should make funding available for permit-related activities. Organizations may need funding to pay for FOIA fees, copies of permits and related documents, travel to DEP offices, or for hosting workshops to learn more about the CWA and the permitting process. DEP should also consider partnering with WVRC in hosting public participation workshops.

7. CONCLUSIONS

WV's NPDES permitting process has generally not been subject to the level of public review and participation envisioned by the CWA. This report provides a basis for sparking a greater level of informed public participation by reviewing a randomly selected set of the state's major permits, assessing key aspects of each permit, and providing recommendations that would improve the flow of information from DEP to the public.

OWR is administering a complex and important program that has gone a long way toward improving the state's water quality. Recent improvements, such as synchronizing permit renewals by watershed in five year cycles, help make the permitting process more accessible to the public. This report's recommendations aim to further increase OWR's accommodation of public involvement in the permitting process.

DEP would benefit in many ways from implementing this report's recommendations. Permit writers, presented with a broader range of local information, will be better able to tailor permits to address local concerns. An open and constructive participation process will also elevate DEP's reputation as the public sees that they consider not only the comments of the regulated industry, but also the comments of others who are affected by permitting decisions.

Balance is important, not just between the public and the permittees, but also between OWR responsibilities and OWR resources. Implementing this report's recommendations would likely require additional funding. There is recent precedent for securing increased OWR funding with the support of key constituents. Improved public participation would benefit a range of stakeholders across the state who would likely be interested in helping to identify new funding needs and in working to make sure these needs are met.

Public participation is essential for achieving balance in the NPDES permitting process. A greater level of public participation will help ensure that permitting decisions are made in the open, take local suggestions into account, follow all applicable laws and regulations, and contribute to the conservation and restoration of the state's water bodies.

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- Code of Federal Regulations. Title 40: Protection of the Environment. www.epa.gov/epahome/cfr40toc.htm.
- Code of State Rules. Title 47, Section 10: National Pollutant Discharge Elimination System (NPDES) Program. www.state.wv.us/csr/verify.asp?TitleSeries=47-10.