

STATE OF WEST VIRGINIA

PRELIMINARY PERFORMANCE
REVIEW OF THE

DIVISION OF ENVIRONMENTAL PROTECTION

Office of Water Resources

*Lack of Adequate
Water Quality Data*

*Backlog in Permit
Process*

Past Due Permit Fees

OFFICE OF LEGISLATIVE AUDITOR
Performance Evaluation & Research Division
Building 5, Room 751
State Capitol Complex

CHARLESTON, WEST VIRGINIA 25305
(304) 347-4890

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Performance Evaluation and Research Division

David Ellis, Research Manager
Steven Lane, Research Analyst
Brian Armentrout, Research Analyst

October, 1995

WEST VIRGINIA LEGISLATURE
Performance Evaluation and Research Division

Building 5, Room 751A
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0592
(304) 347-4890
(304) 347-4889 FAX



Antonio E. Jones, Ph.D.
Director

October 10, 1995

The Honorable A. Keith Wagner
State Senate
Box 446
Iaeger, West Virginia 24844

The Honorable Joe Martin
House of Delegates
Building 1, Room 213E
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305

Gentlemen:

Pursuant to the West Virginia Sunset Law, we are transmitting this Preliminary Performance Review of the Office of Water Resources, which will be reported to the Joint Committee on Government Operations on Monday, October 16, 1995. The issues covered herein are "Lack of Adequate Water Quality Data, Backlog in Permit Process and Failure to Track Annual Permit Fees."

Sincerely,

A handwritten signature in cursive script, appearing to read "Antonio E. Jones".

Antonio E. Jones

AEJ/wsc

Enclosure

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Executive Summary

The Office of Water Resources (OWR) is responsible for administering and issuing permits under the West Virginia/National Pollutant Discharge Elimination System (WV/NPDES). The system, established under the federal Water Pollution Control Act Amendments of 1972 is the federally-approved state permitting system used to regulate the direct discharge of pollutants into the waters of the state. Additionally, the system is used to regulate operations that indirectly result in water pollution through storm water runoff, sedimentation or siltation.

The Legislature's Performance Evaluations and Research Division's preliminary review of OWR found three major areas of operations which could be significantly improved.

ISSUE AREA 1: EFFECTIVENESS OF PERMIT DECISIONS LIMITED BY THE LACK OF DATA ON EXISTING WATER QUALITY

Effective decision making during the permit drafting process is dependent on the accessibility of quality information relating to types and amounts of pollutants to be discharged and the ambient or overall quality of the receiving stream. However, permit drafters often lack sufficient data on ambient water quality for streams throughout the state. The lack of ambient data results primarily from the failure to adequately integrate data collection efforts of various OWR sections. When data is lacking, permit drafters may assume there is zero background presence of a regulated pollutant in a receiving stream. Industrial permit drafters made such an assumption in 50% of the 462 WV/NPDES Industrial permits issued. When such assumptions are used, OWR cannot guarantee that permits adequately preserve water quality and/or allow economic development in accordance with the agency's mission.

ISSUE AREA 2: OWR HAS A BACKLOG AND DELAY IN PROCESSING INDUSTRIAL PERMIT APPLICATIONS

OWR's Permit Section currently has a backlog of 180 industrial permit applications or approximately 39% of the total 462 Industrial WV/NPDES permits issued under its program. Furthermore, OWR has granted 78 extensions which are currently in effect. Extensions are granted automatically when a permit holder submits an application for reissuance and OWR is unable to thoroughly review it. Therefore, if current extensions are included, the backlog in unprocessed industrial permit applications would be 258 applications or 56% of industrial permits. Additionally, it often takes two to three years to process permit applications. Legislative rules authorizing the WV/NPDES program, (47 CSR 10.4.) require that permits be processed within 180 days. The backlog and delay in the permit process may have a negative impact on economic development and may fail to protect water quality.

ISSUE AREA 3: \$106,000 IN ANNUAL PERMIT FEES PAST DUE

On June 28, 1995, there were 198 WV/NPDES permit holders past due in paying \$106,000 in annual permit fees to the Water Quality Management Fund. Of those past due, 67 were late in paying fees by more than 180 days. WVC §22-11-10 requires that OWR void permits of those greater than 180 days past due in paying fees. Poor communication between the Administration and Permit Sections has inhibited OWR's ability to collect the fees. If collected, the revenue could fund additional staff to address the industrial permits backlog discussed in Issue Area 2.

REVIEW, OBJECTIVE, SCOPE AND METHODOLOGY

This review of the Division of Environmental Protection, Office of Water Resources was conducted in accordance with West Virginia Sunset Law, Chapter 4, Article 10, Section 11, of the West Virginia Code, as amended. Preliminary Performance Reviews are intended to assist the Joint Committee on Government Operations in making one of five recommendations:

- The Office of Water Resources be terminated as scheduled;
- The Office of Water Resources be continued and reestablished;
- The Office of Water Resources be continued and reestablished, but the statutes governing it be amended in specific ways to correct ineffective or discriminatory practices or procedures, burdensome rules and regulations, lack of protection of the public interest, overlapping of jurisdiction with other governmental entities, unwarranted exercise of authority either in law or in fact or any other deficiencies;
- A performance audit be performed on the Office of Water Resources; or
- The Office of Water Resources be continued for a period of time not to exceed one year for the purpose of completing a full performance audit.

A preliminary performance review as defined in Chapter 4, Article 10, Section 3 of the *West Virginia Code*, as amended, is to determine the goals and objectives of the Office of Water Resources and to determine the extent to which its operations have met or is meeting those goals and objectives. The criteria for the preliminary performance review set forth in Chapter 4, Article 10, Section 11 of the West Virginia Code, as amended, require the determination of the following:

- If the Office of Water Resources was created to solve a problem or provide a service;
- If the problem has been solved or the service has been provided;
- The extent to which past activities, current projects and operations, and planned activities and goals are or have been effective;
- The extent to which there would be significant and discernible adverse effects on the public health, safety, or welfare if the Office of Water Resources was abolished; and
- Whether or not the Office of Water Resources operates in a fiscally sound manner.

The preliminary review of the Office of Water Resources covers the period of July 1, 1992, to June 30, 1995. However, the review may include events prior to this period when necessary.

The preliminary performance review of the Office of Water Resources included: a planning process; identification of the agency's mission; development of a risk analysis to identify factors that may impede accomplishment of such mission; and, the development of audit steps to examine whether the risks were realized.

Information relating to the Office of Water Resources was obtained through interviews

of personnel within each section of the Office of Water Resources, field visitations, examination of activities of OWR staff and a review of documents relating to three major issue areas identified during the evaluation process. The report includes two issues relating to the permit process in OWR and one issue relating to permit fees. Specifically, these issue areas include:

- Lack of adequate ambient water quality information;
- Backlog in number of permit applications pending processing; and,
- Past due annual permit fees.

MISSION OF THE OFFICE OF WATER RESOURCES

It is the mission of the Office of Water Resources to administer and enforce the Water Pollution Control Act, Groundwater Protection Act, Natural Streams Preservation Act and the Dam Control Act to protect, preserve and enhance water quality and public health while maximizing social and economic development.

BACKGROUND

The Division of Environmental Protection was created during the 1991 Second Extraordinary Session of the Legislature with the passage of H.B. 217. The Office of Water Resources (OWR) was transferred to the Division of Environmental Protection from the Division of Natural Resources by Executive Order 8-92. The Office of Water Resources is composed of six sections which include: Permits; Environmental Enforcement; Program Management/Technical Assistance; Construction Assistance; Dam Safety; and Administration. These sections work together to implement water pollution control policies that are intended to preserve and enhance water quality throughout the state. Before discharging pollutants into waters of the state or engaging in operations that may significantly impact water quality all persons¹ must obtain a permit under the West Virginia/National Pollutant Discharge Elimination System (WV/NPDES) program.²

Within OWR, the engineers and geologists working in the Permits Section are responsible for researching and drafting three categories of WV/NPDES permits. The first category of permits issued by OWR are permits authorizing the *direct* discharge of pollutant-containing effluent associated with industrial operations (**WV/NPDES Industrial permits**). A second category of permits issued by OWR are permits for the *direct* discharge of pollutant-containing effluent associated with sewage treatment facilities (**WV/NPDES Municipal permits**). The third category of permits issued by OWR are permits for facilities which *indirectly* discharge pollutants into waters of the state and may impact water quality through soil erosion, sedimentation, storm water runoff, siltation, etc., occurring as a result of a facility's operations (**WV/NPDES General**).³

¹ West Virginia Code §22-11-3 (Water Pollution Control Act) defines "persons" as any industrial user, public or private corporation, institution, association, firm or company organized or existing under the laws of this or any other state or country; state of West Virginia; governmental agency, including federal facilities; political subdivision; county commission; municipal corporation; industry; sanitary district; public service district; drainage district; soil conservation district; watershed improvement district; partnership; trust; estate; person or individual; group of persons or individuals acting individually or as a group; or any legal entity whatever.

² Definitions for key terms used throughout the report have been included in the Glossary found at the conclusion of the report.

³ While WV/NPDES General and Municipal permits are a significant part of operations at the OWR, the first two issues discussed in this report focus primarily on the activities associated with the processing of Industrial WV/NPDES permits.

Municipal and Industrial WV/NPDES permit applications are further classified as either **major** or **minor** facilities. The classification is based on a United States Environmental Protection Agency (EPA) rating system in which an applicant accumulates points based on several factors including: how the applicant fits within standard industry classification system; volume of pollution proposed for discharge; size of the receiving stream; and toxicity of pollution. If after totaling the number of points accumulated for each category the applicant's score exceeds 80, it is deemed a major facility. If the applicant's score is less than 80, but OWR suspects that the pollutants proposed to be discharged by the applicant may be a significant threat to public health and welfare, it may be deemed a major facility. Municipal facilities that discharge over 1 million gallons of flow per day are classified as major facilities, while those discharging less are considered minor facilities (See Table 1).

TABLE 1		
WV/NPDES PERMITS*		
<u>Category</u>	<u>Major Facilities</u>	<u>Minor Facilities</u>
Municipal	39	1,100
Industrial	62	400
General (Storm water)	<u>N/A</u>	<u>500</u>
Total	101	2,000
*OWR estimates on number of WV/NPDES Permits issued.		

Upon receiving an application, OWR's permit drafting process can be summarized by the following stages:

- (1) **Receipt of Application and Fee Deposit**--Upon receipt of the permit application, OWR's Permit Section determines if the applicant has submitted the appropriate fee. Receipt of such fees are recorded and submitted to the Administration Section for deposit. Fee schedules for WV/NPDES permits are established by Legislative Rules, Title 47, Series 26, of the Code of State Rules.
- (2) **Completeness Review**--The application is then reviewed to determine if it is complete. If determined to be incomplete, the application and a request for additional information is returned to the applicant.⁴
- (3) **Permit Assignment and Drafting**--The permit is assigned to a drafter where data

⁴ *Incomplete permit applications are not included as a part of the industrial permit backlog discussed in Issue Area 2.*

collection and analysis used to establish permit conditions are conducted. If the permit application is for a major facility a Fact Sheet is written describing the methodologies used in developing the permit.

- (4) **Supervisory Review of Draft**--The draft permit and fact sheet are reviewed and approved by the drafting supervisor.
- (5) **Public Comment Period**--After approval by the supervisor, the permit is submitted for a public comment period of 30 days.
- (6) **Permit Issuance**--If the applicant does not contest a permit proposal and if there are no significant third party comment in opposition to the permit the permit is approved by OWR and the Division of Environmental Protection. If the permits is a major facility then the U.S. Environmental Protection Agency must also approve the permit. Permits are valid for five years.
- (7) **Permit Reissuance**-- A permit holder is required to submit an application for reissuance 180 days prior to the expiration date of the permit. If current permit holders wish to make a modification they must submit an application for the change.⁵ Applications for reissuance or modification are processed in the same manner as regular permits.

The permit system establishes conditions by which pollutants are legally allowed to be discharged into waters of the state. The permit system controls and regulates the presence of pollutants known or suspected to be harmful to humans, animals and plant life, including aquatic life.⁶ Additionally, the permit system protects water quality properties such as pH, hardness, temperature, turbidity, odor, conductance and other properties that impact the ability of a stream to sustain aquatic life and allow safe usage of such stream by humans and other non-aquatic life. Therefore, the WV/NPDES permit system is the primary tool for regulating and controlling water pollution in West Virginia.

⁵ According to legislative rules (47 CSR 10.9), modifications require approval through a permit process. Major modifications also include an opportunity for public notice. Major modifications include material and substantial alterations to a permitted facility or activity which will be different from existing permit. Minor modifications include correction of typographical errors, more frequent monitoring or reporting, deletion of point source outlet when discharge from the outlet has been terminated and rerouting of discharge lines.

⁶ The Office of Water Resources controls the discharge of 126 priority pollutants. While there are other substances which may be toxic and may be present in streams, these 126 priority pollutants are considered key indicators for other toxic pollutants that may be present.

ISSUE AREA 1: EFFECTIVENESS OF PERMIT DECISIONS LIMITED BY THE LACK OF DATA ON EXISTING WATER QUALITY

The permit process administered by OWR is a highly technical, scientific process that can be broken down into the need for information regarding two basic questions. First, what are the types and amounts of pollutants to be discharged from a facility? Second, what is the ambient water quality of the receiving stream?⁷ Information supplied by the applicant and the expertise of the permit drafter provide the answer to the first question. However, OWR has not taken adequate steps to integrate data from its various sections into a unified information system that would provide an indication of overall water quality in West Virginia. In order to make effective permit decisions, OWR must create a management information system that will provide information to answer the second question relating to ambient water quality. Lacking adequate and reliable information on water quality for the state, permit drafters are forced to make simplifying assumptions about the ambient water quality of streams rather than using actual knowledge of the quality of the stream. **OWR cannot guarantee that water quality is preserved and enhanced by the permit process when simplifying assumptions are used because they do not have a baseline to determine how much pollution to permit.**

Activities Within OWR Not Coordinated.

OWR engages in a number of regulatory and monitoring activities aimed at protecting, preserving and enhancing water quality. The Permit Section at OWR controls pollutants present in streams by issuing permits and administrative review of discharge monitoring reports (DMRs). These reports, submitted by the permit holder, provide information on the characteristics and quantity of effluent discharges. The reports must be prepared by a laboratory certified by OWR, thereby providing reasonable quality assurance concerning the reliability of information. Other sections of OWR also perform functions relating to implementation of the WV/NPDES system (See Table 2). For example, monitoring of permit holder activities is performed through OWR's Environmental Enforcement Section. Additionally, the Environmental Enforcement Section conducts annual, comprehensive inspections, including sampling and analyses of effluent of all major industrial and municipal facilities to monitor compliance with permits. Environmental Enforcement also conducts periodic inspections and sampling of minor industrial, minor municipal and general permitted facilities.

In addition to the previously mentioned work of the Permits and Environmental Enforcement Sections, OWR monitors water quality through other activities including routine ambient water quality data collection, acute and chronic toxicity testing for selected streams, biomonitoring analysis, benthic and fish tissue analyses for certain streams. Also, OWR's Construction Assistance Section, the office responsible for disbursing State Revolving Fund revenues for the construction and maintenance of municipal sewage treatment plants, requires the submission of engineering reports which contain water quality information related to projects

⁷ Throughout the report the terms "ambient," "overall" and "background" are used interchangeably to refer to the existing total level pollution in a stream or to the total amount of particular pollutant existing in a stream.

which it approves. Additionally, the Office of Water Resources may access water quality information from external sources including the United States Geological Survey (USGS) the United States Environmental Protection Agency (EPA) and the Ohio River Valley Sanitation Commission (ORSANCO).

Not only do these activities contribute to regulation and oversight of permit holders, they also serve as valuable informational resources describing water quality in the state. However, OWR does not coordinate the use of these data resources to provide an indication of overall water quality in permit decisions. Any information sharing that does occur, appears to do so only on an ad hoc basis rather than as a result of the systematic coordination in an information intensive operation. Furthermore, activities regulated by other sections of the Division of Environmental Protection (DEP), including the Office of Mining and Reclamation, Office of Abandoned Mine Lands, Office of Waste Management and Office of Air Quality significantly impact water quality.

Information sharing and communication among all offices of DEP plays an important role in water pollution control in that effective decision-making, particularly permit drafting, is dependent on quality information being available. Thus, communication of data collected within OWR and in other DEP offices is critical to the establishment of an effective management information system. The information collected by OWR and other agencies should provide a measure of overall water quality. At the very least, information should be available to provide an indication of water quality which could trigger further research efforts when necessary. In fact, OWR has identified the need to combine and coordinate its data collection efforts to develop a system to assess overall water quality.

TABLE 2

OWR Activities and Data*

Section	Activity	Data Collected	Database
Permits	<ol style="list-style-type: none"> 1. Issuance of NPDES permits 2. Review of Discharge Monitoring Reports 3. Monitor Concentration of Contaminates in streams 	<ol style="list-style-type: none"> 1. Location of activities which pollute streams 2. Types of pollutants present in streams 3. Amount of pollutants discharged in streams from permitted activities 4. Permit Compliance Histories 	<ol style="list-style-type: none"> 1. NPDES Microfilm index (Quattro Pro) 2. Permit Compliance System (CICS) 3. PCME 4. EPA RREL 5. EPA MCL (QBasic)
Envir. Enforce	<ol style="list-style-type: none"> 1. NPDES compliance inspections 2. Complaint Investigations 3. Investigation of Accidents 4. Review of Discharge Monitoring Reports 5. Sampling of facilities' effluent 	<ol style="list-style-type: none"> 1. All permitted facilities 2. Compliance histories 3. Types of pollutants generated 4. Amount of pollutants generated by facilities 5. Monitoring of pollutants which may enter streams resulting from accidents 	<ol style="list-style-type: none"> 1. ENW. General (SAS) 2. ENW.Spill (SAS)
Prg. Manag.	<ol style="list-style-type: none"> 1. Management of ambient and mini-ambient monitoring stations 2. Wasteload allocations for municipal sewage treatment facilities 3. Generation of Federal reports 4. Storm water program 5. Water constituent analyses 6. Monitoring of fish and aquatic organisms 	<ol style="list-style-type: none"> 1. General stream conditions 2. Reports on impacts of stream pollutants on aquatic organisms 3. Water quality trends 4. Extent to which streams have been adversely impacted by NPDES activities 5. Location of facilities under storm water program 6. Stream pollution generated by storm water facilities 	<ol style="list-style-type: none"> 1. STORET 2. Water Body System (FoxPro) 3. Storm water Permits (SAS) 4. STORET/BIOS
Cons. Asst.	<ol style="list-style-type: none"> 1. Assessments of Sewage Treatment Projects 2. Review of Engineering Reports 	<ol style="list-style-type: none"> 1. Pollutants discharged by facilities receiving SRF assistance 2. Location and number of sewage treatment facilities funded by SRF 	<ol style="list-style-type: none"> 1. GICS (Natural) 2. NEEDS (PL/1) 3. Spreadsheet (LOTUS 123)
Admin.	<ol style="list-style-type: none"> 1. Monitoring of inventory 2. Monitoring of fee collections 	<ol style="list-style-type: none"> 1. Identification of resource needs for all OWR sections 2. Tracking of fees collected by OWR programs 	<ol style="list-style-type: none"> 1. ENW INVENTORY (SAS) 2. Hardware/Software Inventory (DDS) 3. Invoicing/Fee Collection System

* (Source: OWR Data File Descriptions)

Permit Activities Have a Point Source Focus.

In establishing permit limitations, the drafting engineer uses the Toxic Pollutant Control Permitting Strategy.⁸ The strategy requires that permit drafters (1) assure that applicants use best available technology for reducing effluent discharge in that industry and, (2) establish effluent limitations that will ensure that the designated use of the receiving stream as defined in federal and state water quality standards is maintained.⁹ Additionally, federal regulations establish maximum pollutant discharges for facilities depending on its industry classification.¹⁰

Establishing permit limitations for a pollutant requires a comparison be made between two criteria: state established levels depending on designated use of the receiving stream; or the federal standard based on industry type. Subsequently, the most stringent standard is used in determining the permit limitation. Additionally, permit drafters may require the applicant to test and analyze the effluent to determine if it meets standards. A review of fact sheets for major industrial permits as well as testimonial evidence relating to permit decisions generally revealed that ambient water quality may not be taken into consideration by OWR when developing permits. While there is no question that an assessment of the permittee's production process and proposed effluent is a necessary precondition to issuing permits, such a focus does not ensure that the permit decision include a determination of ambient quality of the receiving stream. Alternatively stated, permit decisions are made by focusing on what is coming out of the pipe rather than knowledge of the receiving stream or watershed. In order to effectively assure that water quality is preserved and enhanced, it is necessary to know the overall quality of the receiving stream before permitting additional discharges. It should be noted that EPA is encouraging OWR to develop a watershed management approach to permitting. This strategy will encourage permitting decisions based on ambient or overall water quality for a region as well as the quality of effluent.

Separation of OWR Across Multiple Locations

The separation of OWR Sections across multiple locations appears to contribute to the lack of ambient water quality information. The various sections of OWR are scattered throughout various locations in the greater Charleston area and throughout the State. For example, permitting activities are centered at one location while Enforcement personnel are located in a separate facility. Various functions performed by the Program Management Section, such as laboratory services and water quality trend activities are located at different facilities.

⁸ *The West Virginia Toxic Pollutant Control Permitting Strategy was developed by OWR as a guide to preparing permits. OWR is authorized to create and use the guide under the Code of Federal Regulations 40 CFR Part 122.44 and by West Virginia Code §22-11-14.*

⁹ *Legislative Rules, CSR §46-1-1 et seq. establishes the following water use categories: Category A - Public Water Supply; Category B - Propagation of Aquatic Life; Category C - Water Contact Recreation; Category D - Agriculture & Wildlife Use; and Category E - Industrial Water Supply. Maximum pollution levels for streams vary depending on it designated use.*

¹⁰ *The EPA has developed standards for maximum levels for pollution generated by a particular industry that are based on type of pollution associated with and known treatment processes available to that industry.*

Additionally, the Construction Assistance Section is located at yet another facility. There appears to be no reason for the separate locations except that no one site is large enough to accommodate the various sections. Communication of information between each section appears to suffer as a result of the lack of proximity.

Permit Drafters Make Inadequate Assumptions On Ambient Water Quality.

Lacking practical or up to date information on background quality of streams, permit drafters often make an assumption that a particular pollutant is not present within that stream. When making the zero assumption, an applicant is usually permitted to discharge 20% of the maximum allowable concentration or assimilative capacity of the particular pollutant within that stream. By authorizing the discharge of a portion of the stream's assimilative capacity, OWR hopes that water quality standards are maintained without placing an unnecessary burden on the permit applicant. Nonetheless, repeated use of the zero assumption could result in a stream reaching or exceeding its assimilative capacity resulting in the deterioration of water quality. Alternatively, the 20% ceiling placed on a permit parameter may have a negative economic impact. For example, if a new permit application is submitted to OWR and the zero assumption is used and the 20% ceiling is applied the applicant would be negatively affected if the their production process was more efficient discharging 30% of the parameter.

It should be noted that EPA allows states to make zero background assumptions in cases where data may not be sufficient or is not available. Also, surrounding states were contacted and it was determined that zero background assumptions are used occasionally. Therefore, practicality and industry acceptance of the zero assumption leads to the conclusion that there may be occasions where such assumptions are appropriate. However, OWR estimates that the zero background assumption was used for at least one parameter or pollutant in 50% of the 462 industrial facilities permitted. If one considers the concentration of existing permitted activities on the state's major streams and the various sources of data available to OWR it appears that the assumption is used excessively.

Lack of Water Quality Information Limits Effectiveness of Permit Decisions.

The primary purpose of OWR in implementing WV/NPDES program is to ensure that quality of West Virginia streams are maintained or enhanced. In order to draft permits that achieve this goal established by state and federal laws, an assessment of ambient water quality must be developed. When there is little or no analysis of ambient water quality during the permit review process, OWR cannot ensure that permit decisions effectively protect water quality.

Conclusion:

The Office of Water Resources is charged with protecting, maintaining and enhancing the quality of water resources in the State. Information is the key component of the policies that have been established to protect water quality. This is particularly true for permit decisions. Effective permit decisions regarding water quality can be further enhanced through coordination of data collection activities at OWR. To the extent that OWR makes decisions without necessary information, the Office's ability to assure that water quality is maintained or improved is limited.

Finally, the Office must make the establishment of an effective management information system that tracks the outcomes of its decisions an agency priority.

Recommendations:

(1) OWR should examine the data collected by its various sections and develop a plan to create a management information system that facilitates an assessment of ambient water quality in all permit decisions. In order to maximize scarce resources, the strategy might begin with those streams and watersheds most frequently affected by permit decisions.

(2) OWR should develop a plan to centrally locate the major functions of the Office of Water Resources, while maintaining satellite locations where necessary. The plan may be included as a part of a plan to centrally locate all major offices of the Division of Environmental Protection.

ISSUE AREA 2: OWR HAS A BACKLOG AND DELAY IN PROCESSING INDUSTRIAL PERMIT APPLICATIONS

The Office of Water Resources' Permits Section has a backlog of permits and does not perform a timely review of permit applications for WV/NPDES-Industrial permits. At any given time, OWR has a backlog of an estimated 180 industrial permit applications representing approximately **39%** of 462 industrial permits. Also, the Code of State Rules, Title 47, Series 10, Section 4, requires permit applications to be processed within 180 days. However, it is not uncommon for such permit applications to be processed in **two to three years**. Furthermore, OWR grants extensions to current permit holders when permits approach expiration without adequate review of the permittee's compliance history. If the current extensions (78) are included, the percentage of permits making up the backlog represents **56%** of all industrial permits.

In order to better understand the makeup of the backlog, a non-random sample of 36 backlogged application files were examined. The applications fall into three general categories: applications for a new permit; applications to renew an existing permit; and applications to modify an existing permit. From the sample of 36, there were 6 applications or approximately 17% were for a new permit; 21 applications or approximately 58% were for a renewal of an existing permit; and 19 applications or approximately 5% were for modification of an existing permit.

OWR staff indicated that there were currently 35 permit modifications in the backlog or approximately 20% of the total backlog. Further, permit modifications were kept in a separate place from new permit applications and permit renewal applications. Using this information we can estimate that 18% of the backlogged permit applications are for new permits, 63% of the backlogged applications are for permit renewals and 25% of the applications in the backlog are for permit modifications.

The length of time that permits had been on file with out being processed was estimated by comparing the submission date of the application to August, 1995. The longest amount of time that an application for a new permit had been on file is 10 years. The shortest amount of time is 10 months. The average length of time that a new permit application had been on file is 3 years, 7 months. The age of the oldest application for a permit renewal was 4 years. The most recent renewal application in the sample was August 29, 1995. The average length time that renewal applications in the sample went unprocessed is 2 years, 3 months. The age of the oldest application for a modification of an existing permit is 5 years. The most recently received modification is 2 months. Also, the average age is 1 year, 5 months.

TABLE 3
Breakdown of Backlog

Purpose of Application	Sample Number	% of Total Sampled	Estimated % of Total Backlogged	Range of Time on File	Average Length of Time on File
New Permit	6	17%	18%	10 mo. to 10 yr	3 yr, 7 months
Permit Renewal	21	58%	63%	Current to 4 yr	2 yr, 3 months
Permit Modification	9	25%	19%	2 Mo to 5 yr	1 yr, 5 months
Total	36	100%	100%	N/A	N/A
* Thirty-eight (21%) applications were examined. However, there were two that were unclear as to their purpose (n=36 or 20%)					

In addition to the above information, modification requests were further examined to determine the underlying purpose for the request. Permit modification request are made for three reasons. First, a permit holder may want a change in their production process. Second, the permit holder may want to change their effluent treatment process. Finally the permit holder may request a change in the procedural requirements of the existing permits. For the nine permit modification applications reviewed, there were no requests made as a result of a change in the amount of production, seven modification requests were made where the facility wished to change the treatment process, and two modifications were for procedural changes.

Finally permit applications were examined for timeliness of submission. Extensions are given to permittees applying for renewals if the applications is turned into OWR in a timely manner or 180 days prior to the previous permit's expiration date. Of the 21 applications for renewal of an existing permit, seven were submitted in a timely manner, seven were submitted in a untimely manner, and seven could not be determined if they were submitted in a timely or untimely manner.

OWR's Interpretation of EPA's Guidance.

In its Fiscal Year 1994 guidance document, the EPA encouraged OWR to address the reissuance of major industrial facilities permits which were approaching expiration.¹¹ This led to a decision by the Permits Section-Industrial Branch to focus staff resources exclusively on processing major permit applications. For example, during FY 1993, the Industrial Branch consisted of 16 permit drafters, two of which were stationed at field offices. Also, permit drafters were separated into two groups, one for processing major permits while the other

¹¹ *The United States Environmental Protection Agency's (EPA) Clean Water Act FY 95 Guidance, West Virginia, establishes direction for OWR permitting activities.*

processed minor permits. During FY 1993, the Industrial Branch had a monthly backlog that averaged 87.8 permit applications. The industrial branch issued 79 WV/NPDES permits to minor facilities and 8 WV/NPDES permits to major facilities. OWR processed 54 minor and 4 major permits in FY94. In response to the EPA report, industrial permit drafters were combined to focus on major permits and consideration of minor permits was postponed, except in isolated instances. For example, after three quarters of FY 1995, OWR had a monthly average backlog of 187.7 industrial permit applications. Further, the industrial branch issued 12 permits for minor industrial facilities and 10 permits for major industrial facilities.

It should be noted that minor permit applications are therefore likely to a significant portion of the industrial permits backlog. The decision to focus resources on processing major industrial permit applications has resulted in a slight increase in the number of major permit applications processed and a decrease in the number of minor permit applications processed. Meanwhile, both types of applications continue to be added to the backlog. The significance of this decision cannot be understated. Even though major facilities score higher in the WV/NPDES scheme, minor permits represent a significant potential source of pollution. There are **400** minor industrial permits compared to 62 major industrial permits. Also, despite the potential for misperception resulting from the "major or minor" classification scheme, **it is possible for minor industrial facilities to discharge equally toxic pollutants.**

Understaffing and Turnover Within Industrial Permit Section

Another factor contributing to the backlog in industrial permit applications is that there has been fewer permit drafters dedicated to processing industrial permits. The Industrial Branch has had several of its permit drafters leave and the drafting positions have gone unfilled. For example, the number permit drafters processing industrial permits has decreased from 16 permit drafters in 1993 to 11 drafters in 1995. During FY 95 there were funded vacant positions within the Industrial permit section that, if filled, could have been used to reduce the backlog. However, the Chief of OWR "froze" vacant positions, which are paid for through the Water Quality Management Fund, in order to avoid a shortfall in the Fund. The shortfall in the fund can be traced to two causes. First, as shown in Table 3, receipts were less than expected.

TABLE 4		
Water Quality Management Fund (FY 95)		
Comparison of Estimated and Actual Collections/Expenditures		
	<u>Estimated</u>	<u>Actual</u>
Receipts	\$2,889,500	\$2,455,469
Disbursements	\$2,417,028	\$1,998,028
Sources: Estimate of Receipts and Disbursements FY 94-95 and Legislative Auditor's Office, Budget Division, Run on Expenditures, Water Quality Management Fund on June 30, 1995.		

Second, OWR has increasingly used the Fund to support basic services. For example, OWR has paid for vehicles leased by the Environmental Enforcement Section through the Water Quality Management Fund. According to WVC §22-11-10, the Fund is supposed to be expended for "initial permit applications, renewal permit applications and permit issuance activities." The expenditures for basic services have occurred at the same time that personal services expenditures for permit drafters have stagnated. Given the size of the backlog, OWR management should reevaluate the use of its resources relative to the Permit section. For example, OWR's plan to eliminate all but one of the vacant industrial permit drafting position for FY 96 seems questionable.

Permit Drafting Process Lacks Adequate Automation and Routinization.

The process by which permits are drafted, reviewed and ultimately approved by the drafting supervisor is largely a paper driven process that would be more efficient if OWR enhanced routinization and automation of the permit drafting process. For example, under the current system, data needed in preparing permits is manually research. During the research, permit drafters may not be aware of data that is available for developing the permit. Additionally, the amount of time used in the permit drafting process, particularly supervisory review, could be reduced by "boiler plating" as many functions as possible during drafting stages. If the process is automated the amount of time spent preparing a permit could be decreased. As a result, the time saved could then be used to address the backlog of permit applications.

Delay May Limit Economic Growth.

Economic growth occurs through innovation. As was described above, the backlog includes requests for modification to an existing permit and requests for new permits. In other words, opportunities for innovation and expansion. Businesses can not expand if a they can not

change their production process due to the delay in processing the permit modification.¹² Similarly, if a permitted facility wished to implement a different treatment process that improves the quality of the effluent discharged or decreases operating costs with minimal environmental impact, then the change would require approval by OWR through the permit modification process. Just as with a request for modification to expand an operation, the modification application would likely get caught up in the permit applications backlog. Finally, the backlog also contains requests for new permits. Therefore, economic growth associated to the creation of a new production process or the opening of a new business would be slowed if the permit is caught in the backlog.

Facilities May Operate Without a Valid Permit.

If a facility requests a modification, new permit or renewal and the application is added to the backlog for a significant period of time then the facility is faced with two choices: (1) wait for approval of the application; or (2) operate without a valid permit, in violation of the law. PERD staff has been informed that there have been instances where facilities have operated without approval of their modification request. One explanation for the companies behavior is that they went ahead with the change without a properly modified permit as a result of frustration from not being able to have requests considered.

Extensions Used to Manage Backlog.

The backlog in permit applications limits permit drafters ability to provide thorough review of the compliance history of a permit holder. OWR grants permit extensions to those who have submitted permit reissuance applications in a timely manner. In order to qualify for a permit extension, a permit holder must submit an application for reissuance within 180 days of the expiration date of the permit. If the application is submitted on time and OWR is satisfied with the environmental history of the permit holder, extensions are usually granted automatically. OWR granted over 280 extensions from 1992 to 1995. Also, it is not uncommon for permit holders to be granted multiple permit extensions for up to twelve months at a time. Some of those extensions were initially granted up to five years ago.

While extensions may appear to be an adequate "band-aid," in granting an extension, a permit holder is restricted from significantly modifying the nature of its operations as authorized by the governing permit. Also, the compliance history review done for an extension is not likely to be as exhaustive. Alternatively, if the permit holder fails to submit the application within the 180 day requirement, OWR is precluded from granting such extension. In those cases, the former permit holder is no longer authorized to discharge effluent. The facility may still submit an application for reissuance. However, such application often gets added to the backlog of pending applications. If a facility has been in operation for years, it is possible that the facility will continue to operate without a valid permit. OWR indicated that there have been several instances where facilities have missed the extension deadline, creating this dilemma.¹³

¹² Please note that none of the permit applications sampled were based on a change to the permit holders' production process.

¹³ Some examples were provided where this has occurred.

Conclusion.

The WV/NPDES system is an integral part of the State's water pollution protection effort. Within the system, effective review and timely processing of permit applications are necessary for achieving the agency's mission of protecting the environment while maximizing economic growth. The backlog identified above makes it difficult for OWR to be successful in achieving its mission if regulated firms cannot receive a timely response from the agency or if the agency does not effectively review the permit applications.

Recommendations:

(3) The Office of Water Resources should establish a goal of reducing the backlog of minor and major permit applications pending.

(4) The Office of Water Resources should take steps to fill vacant positions in the Industrial branch of the Permit Section.

(5) The Office of Water Resources should review the permit drafting process and increase computer automation that will reduce or eliminate any unnecessary burdens created by the permit drafting, review and approval process. The strategy might be developed in conjunction with a plan to address the lack of ambient water quality data discussed in Issue Area 1.

(6) OWR should conduct a Governor's Inspire session that includes the Permit Section employees and the Chief to develop a more efficient permit drafting process.

ISSUE AREA 3: THERE IS \$106,000 IN ANNUAL PERMIT FEES PAST DUE

On June 28, 1995, there were 198 or 9.4% of the 2,100 WV/NPDES permit holders past due in paying annual permit fees. Sixty-seven of the 198 permit holders were late in paying fees by more than 180 days. WVC §22-11-10 requires the Office of Water Resources to void permits for those persons who are more than 180 days past due. While the 91% collection rate is a reasonable rate, there was a break down in communication between the Administration and Permit Sections that occurred from July, 1992 to February, 1995 that must be addressed by OWR. The lack of communication inhibited the Permit Section from enforcing statutory provisions regarding delinquent holders and contributed to the depletion of the Water Quality Management Fund.¹⁴

Lack of Reporting Between Sections.

West Virginia Code §22-11-10 requires that persons holding a valid WV/NPDES permit pay an application and annual fees. It further provides that when an annual permit fee is more than one hundred eighty days past due, the permit shall be voided. Within the Office of Water Resources, WV/NPDES fees for new permits are received by the Permits Section. The application fees are recorded by the Permits Section and forwarded to the Administration Section so that they can be deposited to the credit of the Water Quality Management Fund. Permits are valid for five years. Thirty days prior to the anniversary date of the permit, the Administration Section sends the permit holder an invoice for their annual permit fee. The permit holder sends the annual permit fees directly to the Administration Section. If the invoice is not paid within 30 days after the due date, a second invoice is submitted to permit holders. If payment has not been received within 60 days, the Permit Section **should be notified** by the Administration Section. In the event that a permit holder does not pay their annual fee, the Permits Section contacts the permit holder to inform them that the permit will be voided if permit fees are not paid within the 180 day limit. Under this arrangement, Administration is responsible for collecting and depositing fees while the Permits Section pursues administrative enforcement. Thus, communication and reporting between the two sections is important. **However, for nearly three years the Administration Section did not report information to the Permits Section regarding permit holders who were late paying annual permit fees.** In February 1995, Administration finally notified the Permits Section of all permit holders late or delinquent in paying annual permit fees during FY 92-93 and FY 93-94.

OWR Cannot Ensure Effective Enforcement Without Reporting.

State law requires the voiding of permits for those permit holders more than 180 days past due in paying annual permit fees. Within OWR, the Permit Section has the responsibility for taking administrative enforcement action. However, without proper reporting between sections, the ability to enforce the Code is limited. In addition, differential treatment of permit

¹⁴ Annual permit fees under the WV/NPDES program are directed to the Water Quality Management Fund.

holders (requiring some to pay, while allowing others to continue without paying) is inequitable.

Failure to Collect Fees Impacts Water Quality Management Fund.

Revenues from annual permit fees are directed to the Water Quality Management Fund. Shortages in the fund were summarized in Issue Area 2 during the discussion of the backlog in processing permits. While the shortfall in the fund is the likely the result of several factors such as the total amount of revenue provided by the permit holders and expenditure decisions, the uncollected fees contribute to the shortfall in the fund. Further, the unpaid annual permit fees, if collected, could be used to fill vacant positions in the Industrial Branch of the Permit Section to address the backlog.

Conclusion:

OWR management has identified the breakdown in communication that occurred from 1992 to early 1995. The Office has responded by developing an automated invoice and fee collection system which was to be implemented on July 1, 1995. In order to maximize effectiveness of the automated invoice and fee collection system, routine reporting between the Permits Section and Administration Section will be necessary.

Recommendations:

(7) The Chief of the Office of Water Resources should require the Administration Section to submit monthly reports to the Permits Section. The reports should include information describing permit fee due dates, permits fees past due, the number of days past due and the amount owed.

(8) The Permits Section should immediately determine all permit holders who are past due in paying annual WV/NPDES permit fees by more than 180 days and pursue efforts to collect outstanding fees or void permits of those who fail to pay.

GLOSSARY OF KEY TERMS USED THROUGHOUT THE REPORT

Acute toxicity testing - Process used by OWR or a permit holder for measuring the short term impacts of an organism's exposure to pollutants or effluent as a means of assessing quality of a stream or effluent or as an indication of unacceptable levels of pollution within the stream or effluent.

Ambient Monitoring Station - One of 27 sites established throughout the State in which OWR conducts periodic sampling of streams to monitor the presence and concentration of pollutants or a particular pollutant in a stream.

Ambient Water Quality - An assessment of overall quality of a stream or watershed including stream properties such as pH, hardness turbidity, etc. and types and quantity of pollution contained in the stream or watershed.

Assimilative Capacity - The maximum amount of a particular pollutant or pollution that a stream or watershed can sustain without exceeding state and federal water quality standards or adversely impacting users (aquatic, plant and animal life) of the stream as determined by OWR.

Benthic Survey - A stream or effluent quality monitoring process conducted by OWR or a permit holder which measures the impact of pollution or pollutant containing effluent on aquatic organisms (invertebrates).

Best Available Technology (BAT) - One of two principal based effluent limitations established under the federal Clean Water Act of 1979, in which limitations reflect best controls available for waste discharge control for a particular type of industry considering economic impacts.

Biomonitoring - Process for monitoring the short term or long term impacts of the effluent or stream on aquatic life as a means of assessing water quality or an indication of unacceptable levels of pollution contained in the stream or effluent.

Chronic Toxicity Testing - Process used by OWR or a permit holder for measuring the long term impacts of an organism's exposure to pollutants or effluent as a means of assessing quality of a stream or effluent or as an indication of unacceptable levels of pollution within the stream or effluent.

Conductance - A measure of the quantity of electricity transferred across a unit area, per unit potential gradient, per time unit for a particular stream.

Discharge Monitoring Report - The forms prescribed by OWR and the EPA for the reporting of self-monitoring results by permittees.

Effluent - Concentration of waste, including chemical, physical, biological and other constituents that are discharged into waters of the State.

Facility - Any point source or activity that is subject to regulation under the WV/NPDES

program.

Industrial Facility - Industries identified in the federal industrial classification manual and other classes of significant waste producers identified under regulations authorized under the WV/NPDES program and the US EPA.

Major facility - A facility determined by OWR and the US EPA after evaluation to meet certain criteria based on volume of pollutants discharged, toxicity of pollutants discharged and size of stream receiving effluent, which may generally be expected to have a greater impact on water quality.

Mini-ambient Monitoring Station - A water testing station that focuses on impaired watersheds to determine, if possible the degree of impairment, sources and potential for improvement. The stations are monitored monthly on a year to year basis with new sites selected each year.

Minor Facility - An Industrial facility that receives a score of 80 points or less on the NPDES Permit Rating Work Sheet, and not deemed to be a "major" facility or a municipal facility which discharges less than 1 million gallons of flow daily.

Municipal Facility - A facility regulated under the WV/NPDES program that treats water and municipal sewage.

pH - A measure of the acidity or alkalinity of a solution, numerically equal to 7 for neutral solutions, increasing with increasing alkalinity and decreasing with increasing acidity.

Point Source - Any discernable, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or vessel of other floating craft, from which pollutants are or may be discharged.

Pollutant - Any industrial waste, sewage or other wastes as defined in the state Water Pollution Control Act (WVC §22-11-4).

Receiving Stream - the stream that receives effluent from a facility.

State Revolving Fund Program - A program set up for West Virginia communities to receive financial assistance, in the form of low-interest loans, for the construction and upgrade of municipal sewage treatment plants.

Storm water Permit - A permit issued under the WV/NPDES permit program through a general permit to control the storm water runoff from construction sites that disturb three acres or more of land and storm water discharges from certain industrial activities. The permit focuses on the implementation of pollution prevention plans to control or reduce contaminants in storm water runoff.

Stream - A flowing body of water such as a river or a creek.

Turbidity - Cloudiness in water due to suspended and colloidal organic and inorganic material.

Wasteload Allocation - The system used by OWR to measure oxygen levels for a stream at a given location to determine whether or not a municipal sewage treatment facility permit application can be approved without adversely impacting stream quality.

Watershed - A network of connected rivers, streams and tributaries, including the land area in which such streams are contained in.

WV/NPDES - "West Virginia/National Pollutant Discharge Elimination System" means the National program for issuing, denying, modifying, revoking and reissuing, suspending, revoking, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements.

Zero Assumption - The assumption that a specific pollutant is not present in a stream because no water quality data exists because the regulatory agencies did not feel the sampling and analysis for these pollutants were warranted do to what information was known from activities along State waters.

APPENDIX 1



DIVISION OF ENVIRONMENTAL PROTECTION

GASTON CAPERTON
GOVERNOR

10 McJunkin Road
Nitro, WV 25143-2506

LAIDLEY ELI MCCOY, PH.D.
DIRECTOR

October 5, 1995

Dr. Antonio Jones
Director
West Virginia Legislature
Performance Evaluation
and Research Division
Building 5, Room 751A
1900 Kanawha Blvd. E.
Charleston, West Virginia 25305-0592

Dear Dr. Jones:

The following is a response to the draft Preliminary Performance Review of the Division of Environmental Protection Agency (DEP), Office of Water Resources (OWR) transmitted to the agency on September 29, 1995.

ISSUE AREA 1: EFFECTIVENESS OF PERMIT DECISIONS LIMITED BY THE LACK OF DATA ON EXISTING WATER QUALITY

Activities Within OWR Not Coordinated

Water quality data which is collected by OWR and federal agencies such as the U.S. Geological Survey are entered into an U.S. Environmental Protection Agency database called STORET. Data may be retrieved from this database via modem. OWR regularly accesses this information. Although the information may not be readily available on a permit writer's desk during review of a permit, the information may be requested from an environmental resource specialist in OWR's Program Management/Technical Support unit. This process could be improved with acquisition of an appropriate modem for the Industrial Permits unit to allow first hand access to permit writers.

OWR is taking steps to improve coordination between programs in OWR and throughout the agency. Effective October 1, 1995, OWR initiated the Watershed Assessment Program. This program is designed to assess the quality of priority watersheds. The assessment will include collection of biological data as well as water chemistry so as to provide a more complete and comprehensive picture of environmental conditions in the watershed. Part of the initiative is to review existing data, particularly that collected by DEP staff, and to prepare agency guidelines for future data collection. Consistent collection and electronic storage of data will facilitate exchange and sharing of information throughout the agency.

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OWR is also evaluating its current network capability with the headquarters office in Nitro. A significant geographic information system is a resource available in Nitro and is continuing to grow. Currently, OWR is only able to access such data using one computer which will be able to run ARCVIEW, a GIS software. The general hardware and software needs of OWR will continue to be reviewed and addressed during Fiscal Year 1996. The specific needs of the Permits Unit are also being evaluated particularly relative to automation of the permit drafting process. The DEP, Office of Mining and Reclamation has developed a permit database and permit drafting program which may satisfy the needs of OWR Permits. However, should this database not be appropriate, OWR is committed to addressing the electronic needs of the Permits Unit during Fiscal Year 96.

Upgrade of hardware and software in OWR will greatly enhance the opportunities for sharing information available in the Nitro Headquarters.

Permit Activities Have a Point Source Focus

To correctly portray the process in establishing permit limitations, some corrections in discussion of this finding appear necessary. Initially, the technology-based guidelines are reviewed followed by the application of best professional judgement and applicable water quality criteria. Following these steps the permit writer references the Toxic Pollutant Control Permitting Strategy to protect the stream from toxic pollutants.

OWR takes exception to the statement that "A review of fact sheets for major industrial permits as well as testimonial evidence relating to permit decisions generally revealed that ambient water quality data may not be taken into consideration by OWR when developing permits." The National Pollution Discharge Elimination System (NPDES) rules which the permit program has operated under since the inception of the program in 1982 require such a determination be made. The Permits Unit manager reviews all fact sheets and note that they do include information regarding the necessity of a water quality based determination. However, an exception to the above is the Storm Water program which has only monitoring requirements and does not necessitate consideration of ambient water quality. In the case of storm water, should water quality be a concern relative to that discharge, an individual permit may be required.

OWR does not disagree with the need for additional water quality information and concurs with the favorable findings of the performance review with respect to implementation of a watershed approach. We agree that this approach will encourage permitting decisions based upon water quality data for a region.

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Separation of OWR Across Multiple Locations

Physical separation of OWR staff presents a challenge to managers in the organization just as it does in any other organization. As earlier discussed, networking capability maintains a degree of linkage between the Greenbrier Street office and the various other offices in Charleston and around the state. The use of district offices was the result of a decision many years ago to take some of the permitting activities to the area where they were occurring. The district locations provided opportunities to reduce travel and improve interaction with the community and the public. With respect to enforcement activities, inspectors can be more productive when distributed throughout the state and closer to the facilities they regulate.

However, Charleston area OWR locations would be better served by being located in one building. OWR is included in the overall DEP planning effort to locate consolidated office space for Kanawha Valley DEP offices.

Permit Drafters Make Inadequate Assumptions on Ambient Water Quality

OWR concurs with the finding that we use zero as a background level for some constituents in some cases. Any affordable monitoring program could never include everything that is considered, regulated or limited in a permit (i.e., minimum 126 priority pollutants and over 50 water quality parameters). If we assume zero in one permit we should not assume zero again on the same stream without considering the fate of the substance once it enters the stream. Some substances will volatilize immediately, some will attach to sediment, and some will degrade with exposure to sunlight, bacteria, etc.

OWR acknowledges that a zero background level has been assumed on the same stream on more than one occasion. In those cases, the fate of the pollutant was considered along with the capacity of the stream to assimilate particular substances. Also considered was the detection level for the substance. Certain substances may be present at levels below which they can be accurately detected using existing technology. For example, the Ohio River Valley Water Sanitation Commission (ORSANCO) has attempted to sample for several organic pollutants to determine background conditions. These materials are those that are in most common use along the Ohio River and are most likely to be in the river. The result to date has been a consistent non-detect of these pollutants.

With respect to the discussion regarding the 20% ceiling placed on a permit parameter, OWR prefers to err on the conservative side in order to adequately protect water quality.

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Undoubtedly, some negative impact is felt by all of the regulated community in order to provide satisfactory environmental protection.

Lack of Water Quality Information Limits Effectiveness of Permit Decisions

The DEP recognizes that the greater the degree of data on a subject would, in most circumstances, yield a result having greater accuracy. Historically, OWR has collected water quality data through the use of long term ambient networks as well as annual mini-ambient networks which are more intensive for a shorter period of time. Over the years OWR has had to make strategic decisions regarding use of agency resources. One result has been that OWR substantially reduced the long-term monitoring network about five years ago.

Long-term water quality data is subject to a great deal of variance based upon flow conditions, weather, seasonal variations, sampling equipment and location, etc. An extremely high number of samples would be necessary in order to draw valid and statistically defensible conclusions on water quality trends. Permit review and issuance by OWR generally incorporates consideration of 126 priority pollutants and nearly 50 water quality standards established by the Environmental Quality Board. Even the best designed sampling scheme could not affordably allow monitoring of all water quality parameters necessary to provide complete information for permit development. Further, certain organic chemical plant permits require the monitoring of 60-80 pollutants dependent on the type of facility. This data is submitted to the agency for review and can be used to modify a permit if necessary. OWR is not precluded from re-evaluating a permit during the permitted period if just cause is noted.

A mini-ambient network has been used to collect water quality information in areas where agency staff identified a need for additional information. Data collected from the long-term network and the mini-ambient network were entered into the Environmental Protection Agency's STORET database. That database is available for access by OWR personnel. In addition to data collected by OWR, various state and Federal agencies, interstate organizations, and industry sectors regularly water quality information. Mini-ambient network reports are generated annually by Program Management/Technical Support.

While we do not disagree with the need for additional data, DEP is more supportive of intensive stream surveys to answer particular environmental questions. Intensive surveys conducted to answer specific data needs are more reliable than long-term data. DEP is pursuing the use of citizen monitors to collect biological data. OWR has a citizen monitoring coordinator responsible for training citizen monitors in collecting biological

data. Biological data in combination with water quality data is more likely to give an accurate assessment of the current health of a stream or river. Aquatic invertebrates vary with respect pollution tolerance. Based upon the invertebrate population, valid interpretations of existing environmental conditions can be made.

Recommendations-

(1) OWR should examine the data collected by its various sections and develop a plan to create a management information system that facilitates an assessment of ambient water quality in all permit decisions. In order to maximize scarce resources, the strategy might begin with those streams and watersheds most frequently affected by permit decisions.

OWR concurs and is currently evaluating networking opportunities that facilitate sharing of information as well as consistent collection and management of data.

(2) OWR should develop a plan to centrally locate the major functions of the Office of Water Resources, while maintaining satellite locations where necessary. The plan may be included as a part of a plan to centrally locate all major offices of the Division of Environmental Protection.

OWR concurs and is part of the DEP's overall strategy to consolidate the Kanawha Valley offices.

ISSUE AREA 2: OWR HAS A BACKLOG AND DELAY IN PROCESSING INDUSTRIAL PERMIT APPLICATIONS.

OWR's Interpretation of EPA's Guidance

OWR concurs with the conclusion in this section that minor permits are a significant portion of the industrial permits backlog. However, even though we agree that it is possible for minor industrial facilities to discharge equally toxic pollutants, we disagree that this is a major issue in the backlog. Although some minor facilities may discharge toxic pollutants, it is not likely that those pollutants are generated comparable quantity with that discharged from major facilities. If discharge was of a substantial quantity it is more likely that such facilities would be determined to be major facilities.

Under staffing and Turnover Within Industrial Permit Section

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OWR concurs that the Industrial Permits unit is understaffed. Federal funding reductions and insufficient special revenue funds have dictated that as attrition occurs, positions have not been filled. OWR is evaluating opportunities to generate additional funds to improve staffing conditions in both the Industrial and Municipal permit units.

Permit Drafting Process Lacks Adequate Automation and Routinization

This issue was addressed earlier under Issue 1, *Activities Not Coordinated*. As previously stated, OWR concurs with this assessment and is taking steps to remedy the automation issue during this fiscal year.

Delay May Limit Economic Growth

The assertion that permit delays may limit economic growth may be valid, but this is actually more of an observation. There was no apparent attempt during the performance review to actually quantify potential negative impacts to economic growth.

Facilities May Operate Without a Valid Permit

There likely are facilities that are currently operating without a permit. The majority of the time, when permits are being reviewed for reissuance, extensions of the original permit are provided if necessary to maintain the facilities status as a permitted facility. Some non-permitted facilities probably do exist as a result of the backlog, but many more likely exist because they have never applied for a permit and the agency is unaware of their existence. The latter is particularly the case relative to facilities requiring storm water permits.

Hindrance to Water Quality Improvement

The title of this section does not clearly relate to the discussion. The majority of the discussion is in regard to the process to receive permit extensions and the potential to operate without a valid permit. Neither the process nor operation without a valid permit specifically hinder water quality improvement.

Recommendations

(3) The Office of Water Resources should establish a goal of reducing the backlog of minor and major permit applications pending.

OWR concurs and this goal has been established and will continue to be refined.

(4) The Office of Water Resources Should take steps to fill vacant positions in the Industrial branch of the Permit Section.

OWR concurs and is exploring opportunities to generate additional revenue.

(5) The Office of Water Resources should review the permit drafting process and increase computer automation that will reduce or eliminate any unnecessary burdens created by the permit drafting, review and approval process. The strategy might be developed in conjunction with a plan to address the lack of ambient water quality data discussed in Issue Area 1.

OWR concurs. This review of the drafting process is underway as is the evaluation of automation needs. Some reorganization of the permit drafting process is likely to occur. It is expected that significant progress will be made with respect to drafting and automation needs during this fiscal year.

(6) OWR should conduct a Governor's Inspire session that includes the Permit Section employees and the Chief to develop a more efficient permit drafting process.

OWR went through an extensive facilitated process within the last eighteen months. The office is now exploring reorganization opportunities for the Industrial Permits unit which would incorporate ideas generated from permit writers to develop a team approach to permitting.

ISSUE AREA 3: THERE IS \$106,000 IN ANNUAL PERMIT FEES PAST DUE

Lack of Reporting Between Sections

OWR concurs with the finding that the agency was behind in collection of outstanding permit fees. Steps have been taken to remedy this problem. An automated invoicing database has been developed by OWR staff. The database information of permit fees status will be available on the OWR local area network. Permits Unit staff will have ready access to this information.

OWR Cannot Ensure Effective Enforcement Without Reporting

OWR would concur that administrative enforcement may be ineffective if information is not properly reported from the Administrative Unit to the Permits Unit. As earlier stated, a database developed to track permit fees should improve the reporting concern.

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However, OWR will continue to monitor the progress of this reporting to ensure its adequacy in the future.

Failure to Collect Fees Impacts Water Quality Management Fund

Regarding outstanding fees, OWR has sent correspondence to over 50 permittees in the last thirty days to advise them that their permit would be voided if fees were not paid within the specified period. To date, the letters have generated \$18,968 in fees collected.

Recommendations

(7) The Chief of the Office of Water Resources should require the Administrative Section to submit monthly reports to the Permits Section. The reports should include information describing permit fee due dates, permits fees past due, the number of days past due and the amount owed.

As earlier addressed, a tracking database is available on the local area network and will soon be readily available for direct access by the Permits Unit for up to date information.

(8) The Permits Section should immediately determine all permit holders who are past due in paying annual WV/NPDES permit fees by more than 180 days and pursue efforts to collect outstanding fees or void permits of those who fail to pay.

This is currently being done. Over 50 letters to advising permittee of the overdue status were sent out within the last thirty days.

Specific Comments

Pages 3 & 4 - The categories of industrial waste landfills, leachate from sanitary landfills, and stormwater permitting are not included in Tables 1 or 2.

Page 5, Item (5) - Public comment period is 30 days. The reference to 60 days should be deleted.

Page 5, Item (6)-The reference to "If the applicant does not contest a permit decision and..." is incorrect. At the public notice stage, there is no permit decision. When the permit is issued, that is the decision and the applicant can contest that decision through the appeal process to the Environmental Quality Board.

Dr. Antonio Jones
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October 5, 1995

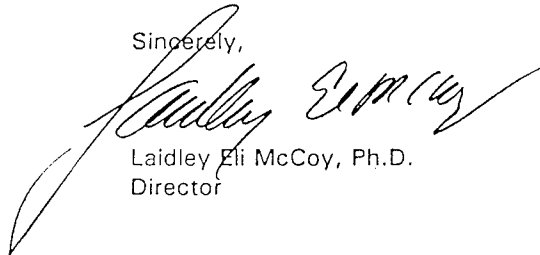
Page 15, First paragraph, Third full sentence- The reference to 74 WV/NPDES permits should be amended to 79.

Page 15, First paragraph, last sentence- The references to 7 permits for minor industrial facilities and 8 permits for major industrial facilities should be amended to 12 and 10, respectively.

Page 15, First paragraph- The permit issuance figures for FY-94 were not included and are 53 permits for minor facilities and 4 permits for major facilities.

Thank you for the opportunity to review the preliminary performance review and provide comments for inclusion in the document. The DEP concurs with many of the issues discussed in the document and we will continue to support the OWR in their effort to improve overall permitting functions and inter-agency coordination.

Sincerely,

A handwritten signature in black ink, appearing to read "Laidley Eli McCoy", is written over the typed name and title.

Laidley Eli McCoy, Ph.D.
Director

LEM/msb