

BEFORE THE RECLAMATION COMMISSION

OXFORD MINING COMPANY, INC.,	:	Case No. RC-08-005
	:	
Appellant,	:	
	:	Review of Notice of Violation 28551;
-vs-	:	Permit D-1196
	:	
DIVISION OF MINERAL RESOURCES	:	
MANAGEMENT,	:	
	:	<u>FINDINGS, CONCLUSIONS</u>
	:	<u>& ORDER OF THE</u>
Appellee.	:	<u>COMMISSION</u>

Appearances: Mark Stemm, Michael B. Gardner, Counsel for Appellant Oxford Mining Company, Inc.;
Mark G. Bonaventura, Assistant Attorney General, Counsel for Appellee Division of Mineral
Resources Management.

Date Issued: January 27, 2009

BACKGROUND

This matter came before the Reclamation Commission upon appeal by Oxford Mining Company ["Oxford"] from Notice of Violation ["NOV"] 28551. This NOV alleged that acid water was discharging from a tiled acid mine drainage seep on Oxford's coal mining and reclamation permit D-1196 area.

On October 1, 2008, the Commission conducted a site view of areas relevant to this appeal. Representatives of both parties were in attendance. On October 2, 2008, this cause came on for hearing before five members of the Reclamation Commission. At hearing, the parties presented evidence and examined witnesses appearing for and against them. Following the hearing, the parties submitted written closing arguments, with the last filing being made on December 1, 2008.

After a review of the Record, the Commission makes the following findings of fact and conclusions of law:

FINDINGS OF FACT

1. In 1998, coal mining and reclamation permit D-1196 was issued to Oxford Mining Company. The permit allowed the mining of coal in Washington Township, Muskingum County, Ohio. Permit D-1196 covers 539 acres, 480 acres of which are owned by the Ohio Division of Wildlife. The acreage owned by the Division of Wildlife is managed by that Division as part of the Tri-Valley Wildlife Area. Memory Road divides the southern portion of the permitted area. Memory Road itself is not included within the permit. Mining on the permit D-1196 area has concluded, and the permit is now in its reclamation stage.

2. During the 1940's, the area now covered by D-1196 was mined and left unreclaimed by a prior mine operator. Spoil piles, created by the previous operator, were left on the area.

3. Permit D-1196 includes a mining and reclamation plan, proposed by Oxford and approved by the Division. The mining and reclamation plan includes the following requirements:

(E)(2) Describe the plan for the treatment of surface and ground water drainage from the area to be disturbed by the proposed coal mining activities.

ALL SURFACE AND GROUND WATER ENCOUNTERED WILL FLOW NATURALLY, BE DIRECTED BY DIVERSION, OR PUMPED TO A SEDIMENT POND FOR TREATMENT, IF NECESSARY, WITH LIME OR SODA-ASH BRIQUETTES TO A PH OF BETWEEN 6.5 – 9.0 BEFORE BEING RELEASED ... ALL WATER DISCHARGED FROM THE PERMIT AREA WILL MEET THE REQUIRED NPDES EFFLUENT LIMITATION STANDARDS AS DESCRIBED ON ADDENDUM TO PT 3, PG 28, E(3).

(Underlining added.)

The mining and reclamation plan for permit D-1196 includes the above-referenced Addendum to Pt 3, Pg 28, E(3), entitled New Source Performance Standards, which sets forth the effluent limitations applicable to the permit. [See Appellee's Exhibit 4.] The standards articulated are based upon the National Pollutant Discharge Elimination System ["NPDES"] standards developed by the Environmental Protection Agency ["EPA"]. In accordance with Oxford's plan, all water discharges from the permit area must have a pH level between 6.5 – 9.0 standard units ["s.u."].

4. In 1998, Oxford obtained a NPDES permit from the Ohio EPA, which required monitoring of several outfalls associated with the permit D-1196 area. The outfalls, identified by the Ohio EPA, were monitored under the NPDES permit, to assure that water quality standards were met. These standards included a requirement that pH levels fall within the range of 6.5 – 9.0 s.u. In late 2005, Oxford's NPDES permit for this area terminated, and Oxford's *monitoring and reporting obligation to the Ohio EPA concluded.*

5. In June 2004, Division Inspector Stonerock became aware of a seep on the permit D-1196 area. The seep is located on the south side of Memory Road in the southeast portion of the permitted area. The seep generates from the old spoil banks left by the previous mining operation. The seep was exposed by Oxford during the creation of an entrance to its haul road or during the improvement of the pre-existing haul road. In August 2004, the pH level at this seep was field-tested by Inspector Stonerock at 4.5 s.u.

6. Discharge from the seep flows from the old spoil bank, through an installed tile or pipe, into a road ditch on the south side of Memory Road. The seep's tiled outlet is located within the permit area, approximately 16 feet upstream of the permit boundary. The permit boundary in this area of the permit is at the edge of Memory Road. At its tiled outlet, the seep mixes with other surface waters and flows approximately 16 feet over the surface to the inlet of the road culvert. The road culvert, which is 51 feet in length, runs beneath Memory Road. The discharge then flows from the culvert's outlet into a ditch on the north side of Memory Road. This ditch parallels Memory Road and is on the opposite side of the road from the seep. The discharge flows approximately 210 feet through this ditch, and is then directed to Impoundment P-13. The permit D-1196 boundary is located some small distance inside the inlet to the Memory Road culvert. *From that point to Impoundment P-13, the water flow is off the permitted area. (See Diagram attached as Appendix 1.)*

7. No testimony or other evidence was introduced at hearing indicating a violation of effluent limitations in waters discharging from the permitted area.

8. Between 2005 and 2007, two repairs to the seep were made. In 2005, Oxford excavated the seep, attempted to remove toxic materials in the area of the seep, backfilled this area with limestone and soda ash and then tiled the seep to the ditch on the south side of Memory Road. In 2007, Oxford added limestone to the area of the tile and seep. In response to Oxford's repair efforts, the quality of the seep improved.

9. The quality of the seep has varied over time, and has been a frequent subject of discussion between the Division and Oxford.

10. On January 23, 2008, Division Inspector Stonerock conducted an inspection of the permit D-1196 area. During this inspection, Inspector Stonerock estimated the seep's flow at approximately 1 gallon/minute. Inspector Stonerock field-tested the seep at its tiled outlet ["Sample Point A," as identified on Appendix 1]. This field test revealed a pH between 6 - 6.5 s.u. Stonerock also field-tested the flow at a point 9 feet downstream from Sample Point A, and nearer to the Memory Road culvert. ["Sample Point B," as identified on Appendix 1]. The field pH at Sample Point B was between 6.5 - 7 s.u. These field results led Inspector Stonerock to collect additional water samples from these two sample points. The collected samples were properly preserved, iced and transported to a laboratory. Laboratory testing showed the pH level at Sample Point A to be 5.97 s.u. The laboratory results from Sample Point B showed a pH of 6.1 s.u. The D-1196 permit boundary in this area is located at the edge of Memory Road. The seep's tiled outlet, or Sample Point A, is located approximately 16 feet from the permit boundary. Sample Point B is located approximately 7 feet from the permit boundary.

11. On January 24, 2008, the Division issued NOV 28551 to Oxford. This NOV alleged a violation of O.R.C. §1513.16(A)(10)(a)(i) & (ii), O.A.C. §1501:13-9-04(B)(6) and O.A.C. §1501:13-9-04(J), and states:

Acid water (pH = 5.97 su) is discharging from a tiled AMD seep south of Memory Road and into the road ditch.

The NOV directed Oxford to:

Treat all acid water to a pH between 6.5 – 9.0 su prior to discharge.

An abatement deadline of January 30, 2008 was established. Oxford abated this violation, and on February 1, 2008, NOV 28551 was terminated.

DISCUSSION

Coal mining operations are permitted and regulated by the Chief of the Division of Mineral Resources Management under the authority of Ohio Revised Code Chapter 1513. Ohio's mining law requires that mining and reclamation activities proceed in accordance with the requirements of Chapter 1513, and that these activities be conducted consistent with the provisions of a mining and reclamation plan approved by the Division of Mineral Resources Management. See O.R.C. §1513.02; O.R.C. §1513.07. To this end, an operator must submit a permit application setting forth in detail, its plans for mining and reclamation. See O.R.C. §1513.07(B)(5); O.A.C. §1501:13-4-01 & O.A.C. §1501:13-4-04.

One important focus of Chapter 1513 is the protection of water resources, and the protection of the hydrologic balance in the area of a mining permit. The statute and rules addressing mining and reclamation include several provisions intended to protect these resources and prevent or minimize water pollution. Additionally, a mining and reclamation permit must set forth a treatment plan for any surface or ground water drainage from the area disturbed by a mining operation.

Oxford's mining and reclamation plan for the permit D-1196 area includes a commitment to treat all surface and ground water encountered on the permitted area, so that a pH between 6.5 – 9.0 is achieved at the point of discharge from the permit area, stating:

All surface and ground water encountered will flow naturally, be directed by diversion, or pumped to a sediment pond for treatment, if necessary, ... to a pH of between 6.5 - 9.0 before being released ... all water discharged from the permit area will meet the required NPDES effluent limitation standards ...

The facts of this appeal reveal that a seep, exposed by Oxford during its mining activities, was tiled to a location in the vicinity of Memory Road. On January 23, 2008, the quality of the seep was tested at its tiled outlet (Sample Point A). Field and laboratory tests were also taken on January 23, 2008 at a point approximately 9 feet downstream of the tiled seep outlet (Sample Point B). Sample Point A is approximately 16 feet upstream from the permit D-1196 boundary, while Sample Point B is approximately 7 feet upstream from the permit boundary. Laboratory results from both sample points showed a pH level below 6.5 - 9.0 s.u. Based upon these test results, Division Inspector Stonerock issued NOV 28551, asserting that the discharge associated with this seep failed to meet the NPDES effluent limitations set forth as part of Oxford's mining and reclamation permit.

Oxford has argued that NOV 28551 is defective, in that certain information included within this enforcement action is inaccurate. The NOV described the violation as follows:

Acid water (pH = 5.97) is discharging from a tiled AMD seep south of Memory Road and into the road ditch.

"Acid water" is defined at O.A.C. §1501:13-1-02(D) as any water, the pH of which, as determined by standard methods, is less than 6.0 s.u. Oxford argues that standard practice for reporting pH levels requires that the level be reported only to the closest tenth. Oxford asserts that the laboratory results associated with the seep should be rounded to a pH of 6.0 s.u. Therefore, Oxford argues that the seep does not qualify as "acid water."

The NOV also refers to the seep as a "tiled AMD [acid mine drainage] seep." "Acid [mine] drainage" is defined in the mining regulations at O.A.C. §1501:13-1-02(B) as water with a pH of less than 6.0 s.u. and in which total acidity exceeds total alkalinity. Again, Oxford argues that the pH of the seep should be read as 6.0 s.u. Moreover, the laboratory results from this seep reveal that total alkalinity, in fact, greatly exceeded the total acidity. Therefore, Oxford argues that the description of the seep as a "tiled AMD seep" is inaccurate.

Notices of violation are issued by the Division under the authority of O.R.C. §1513.02(D)(4), which states in pertinent part:

Notices of violation and orders issued pursuant to this section shall set forth with reasonable specificity the nature of the violation and the remedial action required, the period of time established for abatement, and a reasonable description of the portion of the coal mining and reclamation operation to which the notice or order applies.

The facts of this case reveal that the seep at issue was well known to both the Division and Oxford. This seep had been the subject of many discussions between the operator and the Division inspector, and had, indeed, been the subject of a previously-issued NOV. While the Commission agrees that the description of the seep as "acid water" or as an "AMD seep," is inaccurate, the description of the seep contained in the NOV was adequately specific to inform the operator of the violation being addressed within the NOV in this case.¹ The fact that Oxford quickly abated the cited violation further indicates that Oxford was not misled by the language of the NOV. The Commission **FINDS** that the description of the violation contained in NOV 28551 was reasonably specific, was understood by Oxford, and that the NOV should not fail based upon the description of the violation set forth therein.

¹ A determination of whether an NOV describes with reasonable specificity the violation in question shall be made on a case-by-case basis. The better practice for the Division is to ensure that defined terms from Ohio Revised Code and/or Ohio Administrative Code provisions that are applicable to it, are only used in those instances when the definition of the defined term is properly applicable to the activity that is the subject of the NOV. Generic use of defined terms can create confusion.

Oxford has also argued that the statutory and regulatory citations provided within the NOV were inaccurate. The NOV cites a violation of O.R.C. §1513.16(A)(10)(a)(i) & (ii) and O.A.C. §1501:13-9-04(B)(6) and (J). Each of these sections of law addresses the quality of water either on, or discharging from, an area affected by mining. Arguments have been advanced by Oxford suggesting that none of these sections of law actually address the violation alleged by the Division. NOV 28551 described a violation of failure to meet the effluent limitations set forth within Oxford's approved permit. The cited statute and regulations do not specifically speak to the actual facts of this situation. However, under O.R.C. §1513.02(D), which articulates the required features of an NOV, citations to law need not be included within the NOV.

Moreover, this Commission has held that the Division's failure to cite the correct statute or rule alleged to be violated in an NOV is not, necessarily, fatal to the validity of the NOV. Muskingum Mining, Inc. v. DOR, RBR-4-86-226 (April 17, 1987). This Commission has held that it is most important for a NOV to accurately describe a violation of Ohio law; as the description portion of an NOV will take precedence over an erroneous citation of the statutes or rules violated. Raven-Hocking Coal Corporation v. DOR, RBR-6-83-011 & 012 (December 13, 1984), *aff'd* Ct. App., Vinton Cty., appeal no. 419, 1986 WL 6519 (June 11, 1986). The same conclusion reached by the Commission in the Raven-Hocking case, was reached by the Seventh District Court of Appeals in Oxford Mining Company v. Sponsler, 156 Ohio App.3d 557, 560-561 (March 26, 2004), wherein the Court held:

Appellant argues that these sections were not mentioned in the NOV. Therefore, it contends that it did not have notice, as required by administrative due process, of this violation and was not prepared to defend against this allegation.

R.C. 1513.02(D)(4) sets out the requirements for a notice of violation, stating, "Notices of violation and orders issued pursuant to this section shall set forth with reasonable specificity the nature of the violation and the remedial action required, the period of time established for abatement, and a reasonable description of the portion of the coal mining and reclamation operation to which the notice or order applies."

The NOV described appellant's violation as "accumulated water is in contact with toxic material, in a pit within the watershed of impoundment number 10-B." It also listed R.C. 1513.16(A)(10)(a)(i) and Ohio Adm. Code 1501:13-9-04(J)(2) as the applicable statute and rule. This description sets forth appellant's violation with reasonable specificity. It puts appellant on notice that it cannot accumulate water in the pit with toxic materials. It also provides specific sections of the Revised Code and Administrative Code that apply. While the commission may have looked to other related sections in determining whether to affirm the NOV, appellant was well aware of the condition on the mine site for which the NOV was issued - water in a pit coming in contact with toxic material. There is no requirement in R.C. 1513.02(D)(4) that the NOV list every applicable statutory section or regulation that might apply. In a similar case, an appellant-mining company claimed its notices of violation, in order to meet the specificity requirement of R.C. 1513.02(D)(4), should have cited the exact statutes or rules violated. The Fourth District disagreed stating, "We note the statute [R.C. 1513.02(D)(4)] does not require the notices of violation to state the exact statutes or rules violated. The statute only requires the notices of violation to state with 'reasonable specificity' the nature of the violation and the remedial action required." Raven-Hocking Coal Corp. v. Mamone (June 11, 1986), 4th Dist. No. 419, 1986 WL 6519. Thus, the NOV gave appellant adequate notice of its violation. Accordingly, appellant's first assertion is without merit.

The Commission **FINDS** that reference to statutes or regulations is not an essential element of a properly issued NOV. Again, O.R.C. §1513.02(D) requires only that the NOV describe the violation cited with reasonable specificity. The Commission **FINDS** that the NOV is not defective due to inaccurate reference to statutes or regulations, where the operator clearly understood the nature of the violation cited, based upon the description contained in the NOV.

Having found that the NOV is poorly worded, but not fatally flawed on its face, the Commission must now turn to the question of whether the Division has proven that a violation of law occurred on the permit D-1196 area on January 23, 2008.

Oxford's mining and reclamation plan pledges that Oxford will ensure that all water discharges from the permit D-1196 area will possess a pH level between 6.5 – 9.0 s.u. This standard is also the standard required under a NPDES permit, issued and enforced by the Ohio EPA. Oxford argues that, as its NPDES permit had terminated prior to the issuance of NOV 28551, Oxford was no longer obligated to ensure that water discharges from the permitted area of D-1196 met those effluent limitations. While Oxford's monitoring and reporting requirements to the Ohio EPA may have concluded once its NPDES permit terminated, the mining and reclamation plan for D-1196, on file with the Division, remained in effect, and contained the effluent limitation requirements for water leaving the permitted area of a pH level between 6.5 – 9.0 s.u. as set forth in the reclamation plan at Addendum to Part 3, Page 27, (E)(1)(c)(3), which incorporates the pH limitations set forth at Addendum to Part 3, Page 28, (E)(3). [See Appellee's Exhibit 4.]

Oxford's obligation to comply with its mining and reclamation plan does not depend upon the existence of a NPDES permit, and the termination of an NPDES permit does not act to modify the terms of an approved mining and reclamation plan. The Commission **FINDS** that, on January 23, 2008, Oxford was obligated, by virtue of its mining and reclamation plan, to ensure that all discharges from the permit D-1196 area met a pH level between 6.5 – 9.0 s.u. as set forth in its plan.

Oxford's mining and reclamation plan also clearly establishes the point of compliance for meeting effluent limitations. In accordance with the permit language, all water **discharged from the permit area** must meet the effluent limitations set forth in the mining and reclamation plan.

The evidence presented at hearing established that the water samples collected in support of NOV 28551 were collected at points approximately 16 feet and approximately 7 feet from the permit boundary. These samples reflect water quality on the permitted area.

The evidence also revealed that the pH level of ground water rises quickly, and over a relatively short distance, once a seep emerges from the ground. Particularly persuasive on this point was the testimony of Paul F. Ziemkiewicz, Ph.D., qualified by this Commission as an expert in the analysis and interpretation of data relating to acid mine drainage. Dr. Ziemkiewicz testified that, due to the natural effervescence of carbon dioxide, the pH of ground water reaching the surface will rise quickly until the water reaches its state of equilibrium. All of the testing data admitted into evidence showed that the pH of the water did rise the further the sample was taken from the tiled end of the seep. Therefore, the testing location is highly significant in determining the pH level of a discharge from a permitted area.

The Division's evidence did not establish the pH of a discharge where it exits the permit area, or after that discharge exits the permit area. Oxford's mining and reclamation plan sets forth effluent limitations for discharges from the permitted area. The evidence presented at hearing did not establish the pH of the discharge from the permit area. Therefore, the Commission **FINDS** that the Division did not properly establish a violation of the terms of Oxford's mining and reclamation permit.

CONCLUSIONS OF LAW

1. The ultimate burden of persuasion in this matter is upon the Appellee Division of Mineral Resources Management to prove by a preponderance of the evidence that the issuance of Notice of Violation 28551 was not arbitrary, capricious or inconsistent with law. See O.R.C. §1513.13(B).

2. O.R.C. §1513.02(D)(2) provides in part:

When the chief or an authorized representative of the chief determines that any person is in violation of any requirement of this chapter or any permit condition required by this chapter, but the violation does not create an imminent danger to the health or safety of the public or cannot reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources, the chief or the authorized representative shall issue a notice of violation to the person or the person's agent fixing a reasonable time for the abatement of the violation ...

(Emphasis added.)

3. O.R.C. §1513.07 requires that:

- (A) (1) No operator shall conduct a coal mining operation without a permit for the operation issued by the chief of the division of mineral resources management.

4. O.R.C. §1513.07(B)(5) requires that all mining permits contain a reclamation plan meeting the requirements of Ohio law.

5. O.A.C. §1501:13-9-04 addresses the protection of the hydrologic system associated with a mining operation and provides in pertinent part:

(B) Water quality standards and effluent limitations.

(1) All surface drainage from the disturbed area, including disturbed areas that have been graded, seeded, or planted, shall be passed through a sedimentation pond or a series of sedimentation ponds before leaving the permit area until vegetation is established, at which time vegetation of the area may be the best technology currently available, provided that drainage from the area:

(a) Meets effluent limitations ...

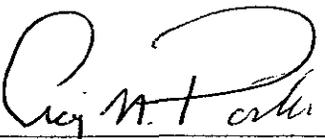
6. Permit D-1196 requires that all water discharges from this permitted area meet certain effluent limitations, including a pH level between 6.5 - 9.0 s.u.

7. The issuance of Notice of Violation 28551 to Oxford Mining Company was inconsistent with law, as the Division did not establish a violation of the permit effluent limitations at the permit boundary, as required by coal mining and reclamation permit D-1196.

ORDER

Based upon the foregoing findings of fact and conclusions of law, the Commission hereby **VACATES** the Chief's issuance of Notice of Violation 28551 to Oxford Mining Company.

1/22/09
DATE ISSUED



CRAIG N. PORTER, Chairman
Reclamation Commission

INSTRUCTIONS FOR APPEAL

This decision may be appealed to the Court of Common Pleas, within thirty days of its issuance, in accordance with Ohio Revised Code §1513.14 and Ohio Administrative Code §1513-3-22. If requested, copies of these sections of the law will be provided to you from the Reclamation Commission at no cost.

DISTRIBUTION:

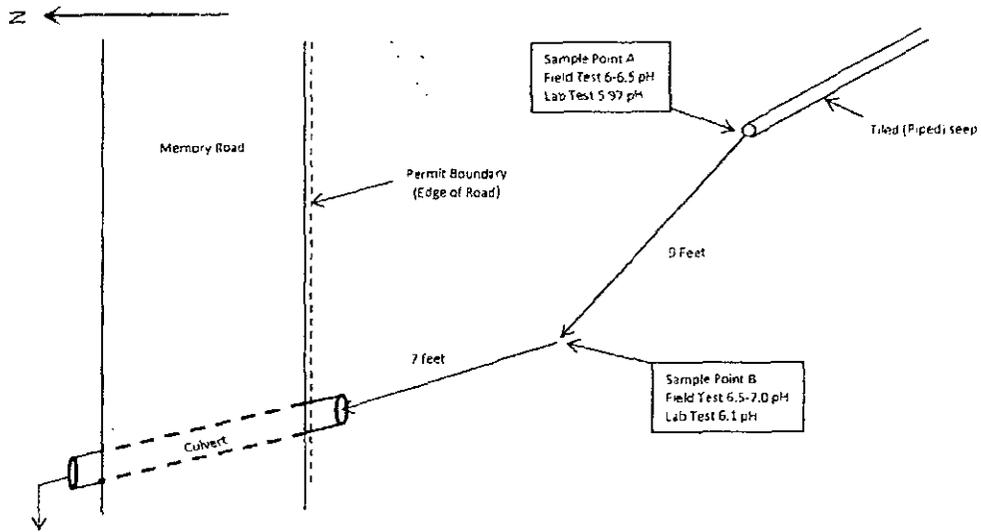
Michael G. Gardner, Via Certified Mail #: 91 7108 2133 3934 5935 2312
Mark S. Stemm, Via Fax [614-227-2100] & Certified Mail #: 91 7108 2133 3934 5935 2329
Mark G. Bonaventura, Via FAX [614-268-8871] & Inter-Office Certified Mail #: 6484

APPENDIX 1

Reclamation Commission Diagram
of
Sample Locations and Permit
Boundary

NOT TO SCALE

RC - 08-005
Oxford Mining Company, Inc.
vs.
Division of Mineral Resources Management
January 2009



**BEFORE THE
RECLAMATION COMMISSION**

OXFORD MINING COMPANY, INC.,	:	Case No. RC-08-005
	:	
Appellant,	:	
	:	Review of Notice of Violation 28551;
-vs-	:	Permit D-1196
	:	
DIVISION OF MINERAL RESOURCES	:	
MANAGEMENT,	:	
	:	<u>INDEX OF EVIDENCE</u>
	:	<u>PRESENTED AT HEARING</u>
Appellee.	:	

Before: James McWilliams

In Attendance: Richard Babb, Sean McCarter, Craig Porter, Ray Rummell and Hearing Officer Linda Wilhelm Osterman.

Appearances: Mark Stemm, Michael B. Gardner, Counsel for Appellant Oxford Mining Company, Inc.; Mark G. Bonaventura, Assistant Attorney General, Counsel for Appellee Division of Mineral Resources Management.

WITNESS INDEX

Appellee's Witness:

Robert Stonerock	Direct Examination; Cross Examination
------------------	---------------------------------------

Appellant's Witnesses:

Richard Smith	Direct Examination; Cross Examination
R. Wayne Light	Direct Examination; Cross Examination
Dr. Paul F. Ziemkiewicz, Ph.D.	Direct Examination; Cross Examination

EXHIBIT INDEX

Appellant's Exhibits:

Appellant's Exhibit 1	Map showing area of seep
Appellant's Exhibit 2	Reproduction of Map marked as Appellant's Exhibit 1, showing detail of seep area
Appellant's Exhibit 3	Marked aerial photograph of area of seep; flown in approximately 2005
Appellant's Exhibit 4	Summary of sampling data from seep and five other sites; taken between January and August 2008
Appellant's Exhibit 5	Notice of Intent For Coverage Under Ohio Environmental Protection Agency General Permit; signed January 26, 1998; Coal Mining and Reclamation Application 1444 (permit D-1196)
Appellant's Exhibit 6	Monthly Report Form for outfalls #1 through #14, excluding outfalls #8 and #9; collected May 2005, completed June 10, 2005
Appellant's Exhibit 7	Monthly Water Analysis for Pond 013 (accumulated water and discharge when there was flow); reporting from November 2002 through August 2005
Appellant's Exhibit 8	Monthly Water Analysis for Pond 013, only showing samples of discharge; reporting from November 2002 through May 2005
Appellant's Exhibit 9	Monthly Report Form; for outfalls #1 through #14, excluding outfalls #1, #2, #3, #4, #5, #7, #13; collected October 2005, completed November 9, 2005; includes Request to Remove Siltation Structures and Termination of the Two Year Period, approved October 17, 2005
Appellant's Exhibit 10	Calendar Year 2004 Summary of OEPA / ODNR Monthly Effluent Reporting Data NPDES Outfall P-012, including pre-mining data from September 1997 and November 1997

Appellant's Exhibit 11	Calendar Year 2005 Summary of OEPA / ODNR Monthly Effluent Reporting Data NPDES Outfall P-012
Appellant's Exhibit 12	Resume, Paul F. Ziemkiewicz, Ph.D., with expert witness history
Appellant's Exhibit 13	Description of Standard Method 4500-H

Appellee's Exhibits:

Appellee's Exhibit 1	Application Hydrology May for permit D-1196 (notarized December 16, 1998)
Appellee's Exhibit 2	Notice of Violation 28551, issued January 24, 2008
Appellee's Exhibit 3	Chain of Custody Form, Samples 388 & 389; dated January 23, 2008
Appellee's Exhibit 4	Portions from Reclamation Plan for permit D- 1196
Appellee's Exhibit 5	Two photographs; taken in February 27, 2007
Appellee's Exhibit 6	Two photographs; taken February 2, 2008
Appellee's Exhibit 7	Two photographs; taken February 2, 2008
Appellee's Exhibit 8	Two photographs; taken February 2, 2008
Appellee's Exhibit 9	One photograph; taken March 14, 2008
Appellee's Exhibit 10	Two photographs; taken March 14, 2008
Appellee's Exhibit 11	Two photographs; taken February 27, 2007
Appellee's Exhibit 12	One photograph; permit D-1196; taken February 27, 2007
Appellee's Exhibit 13	Two photographs; permit D-1196; taken February 27, 2007

Appellee's Exhibit 14

Two photographs; permit D-1196; taken February
27, 2007

Appellee's Exhibit 15

Hydrologic Inventory, seeps #1, #2, #3 & #4;
samples measured January 24, 2008