pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0216038**
Facility Type	**Industrial**	APS ID	**995451**
Major / Minor	**Minor**	Authorization ID	**1277121**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Murray American River Towing, Inc.**	Facility Name	**Alicia Dock**
Applicant Address	46226 National Road	Facility Address	379 Alicia Road
	St. Clairsville, OH 43950		East Millsboro, PA 15433-1252
Applicant Contact	Jon Nagel	Facility Contact	Joe Osterberger
Applicant Phone	740-338-3100	Facility Phone	724-684-2330
Client ID	311117	Site ID	239958
SIC Code	4499	Municipality	Luzerne Township
SIC Description	Trans. & Utilities - Water Transportation Services, Nec	County	Fayette
Date Application Received	January 20, 2006	EPA Waived?	Yes
Date Application Accepted	February 8, 2006	If No, Reason	

Purpose of Application: Renewal of Individual minor NPDES permit with ELG

Summary of Review

The permittee submitted an NPDES permit renewal application for the Alicia Dock Coal Transfer facility in Luzerne Township, Fayette County.

This permit renewal incorporates an ownership change, from Consol Docks, Inc. to Murray American River Towing, Inc. The transfer of ownership occurred on December 4, 2013. The Permit Transfer application was received by the Department on June 18, 2019. The transfer is for NPDES permit PA0216038 and for WQM permit 2696203.

Murray Energy Corporation ("Murray Energy") acquired Consolidation Coal Company ("Consolidation Coal") from CONSOL Energy, Inc. ("CONSOL") on December 4, 2013.

The river transportation operations at the Alicia Dock facility will be conducted by Murray American River Towing, Inc.

The current permit is issued to:
Consol Docks, Inc.
1200 Maronda Way Suite 100
Monessen, PA 15062

Contact Person:
Joe Osterberger – Manager-Compliance
724-684-2330
joesephosterberger@coalsource.com

For a facility located at:
Alicia Dock
State Road 4022
Brownsville, PA 15417

Approve	Deny	Signatures	Date
X		Mark S. Okrutny / Environmental Engineering Specialist	August 20, 2019
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	8/20/19

Summary of Review

The permit is being transferred to:
Murray American River Towing, Inc.
46226 National Road
St. Clairsville, OH 43950

Contact Person:
Jon Nagel – Manager of Environmental Compliance
740-338-3100
jnagel@coalsource.com

Alicia Dock is a clean coal transfer facility on the east bank of the Monongahela River. Clean coal is brought into the facility by rail. The coal is then transported by conveyor to transfer building No. 1 and then transfer building No. 2 for barge load out.

The site includes several small buildings, a conveyor handling system, a floating docking area for barges, an electrical substation, parking areas and a rail line. The facility is bordered by a road and railroad tracks, wooded areas and the Monongahela River.

The facility has three sedimentation basins: SB-1, SB-2 and SB-3. These basins receive process wastewater (washdown water) from the coal handling operation and stormwater runoff from the plant area. The sedimentation basins discharge to the Monongahela River via outfalls 001, 002 and 003 respectively.

SB-1 (001) collects stormwater runoff and process water collected in the sumps and washdown at transfer buildings No. 1 and No. 2. SB-2 (002) collects stormwater runoff and process water collected in the sumps used for the washdown at the rail car dumper building. SB-3 (003) receives additional process water from sumps at the equipment maintenance building from the washdown of building floors and mobile equipment. Each sedimentation basin discharges through a pipe spillway to the Monongahela River.

The most recent on-site inspection was conducted by Bradley Kline of the Department on October 19, 2017. No violations were noted. Searching WMS via client ID, no open violations were found for either Consol Energy or Murray American River Towing, Inc.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.0062575
Latitude	40º 00' 37"	Longitude	-79º 55' 46"
Quad Name	California & Carmichaels, PA	Quad Code	1806
Wastewater Description:	IW Process Effluent with ELG, Stormwater		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99411988	RMI	58.67
Drainage Area	4980 mi^2	Yield (cfs/mi^2)	0.0769
Q_{7-10} Flow (cfs)	530	Q_{7-10} Basis	U.S. Army Corp of Engineers
Elevation (ft)	744 normal pool elevation	Slope (ft/ft)	0.001 assumed
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	
Exceptions to Use	Navigation	Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs) and Chlordane		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company, Brownsville, PA		
PWS Waters	Monongahela River	Flow at Intake (cfs)	600
PWS RMI	57.0	Distance from Outfall (mi)	1.67 miles

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	.075
Latitude	40º 00' 29"	Longitude	-79º 55' 49"
Quad Name	California & Carmichaels, PA	Quad Code	1806
Wastewater Description:	IW Process Effluent with ELG, Stormwater		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99411988	RMI	58.90
Drainage Area	4980 mi^2	Yield (cfs/mi^2)	0.0769
Q_{7-10} Flow (cfs)	530	Q_{7-10} Basis	U.S. Army Corp of Engineers
Elevation (ft)	744 normal pool elevation	Slope (ft/ft)	0.001 assumed
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	
Exceptions to Use	Navigation	Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs) and Chlordane		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company, Brownsville, PA		
PWS Waters	Monongahela River	Flow at Intake (cfs)	600
PWS RMI	57.1	Distance from Outfall (mi)	1.67 miles

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	.0245
Latitude	40º 00' 52"	Longitude	-79º 55' 31"
Quad Name	California & Carmichaels, PA	Quad Code	1806
Wastewater Description:	IW Process Effluent with ELG, Stormwater		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99411988	RMI	58.30
Drainage Area	4980 mi^2	Yield (cfs/mi^2)	0.0769
Q_{7-10} Flow (cfs)	530	Q_{7-10} Basis	U.S. Army Corp of Engineers
Elevation (ft)	744 normal pool elevation	Slope (ft/ft)	0.001 assumed
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	
Exceptions to Use	Navigation	Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs) and chlordane		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company, Brownsville, PA		
PWS Waters	Monongahela River	Flow at Intake (cfs)	600
PWS RMI	57.1	Distance from Outfall (mi)	1.67 miles

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	.0062575
Latitude	40º 00' 37"	**Longitude**	-79º 55' 46"
Wastewater Description:	Washdown water and Stormwater		
Outfall No.	002	**Design Flow (MGD)**	.075
Latitude	40º 00' 29"	**Longitude**	-79º 55' 49"
Wastewater Description:	Washdown water and Stormwater		
Outfall No.	003	**Design Flow (MGD)**	.0245
Latitude	40º 00' 52"	**Longitude**	-79º 55' 31"
Wastewater Description:	Washdown water and Stormwater		

All three outfalls are comprised of stormwater combined with washdown water that comes in contact with coal or coal dust. All three outfalls will have the same limits. Sedimentation Basin 1 (SB-1) is located near the center of the property. SB-1 collects stormwater runoff from the Transfer Buildings area and includes runoff from beneath the transport belt and surrounding area drains. The process water consists of coal washdown water collected in the sumps at coal Transfer Buildings No. 1 and No. 2. The areas that are washed down include building floors, the conveyor structure and walkways. Wastewater is pumped from the collection sumps to SB-1. SB-1 discharges through a pipe spillway (001) to the Monongahela River.

Sedimentation Basin 2 (SB-2) collects stormwater from the southwestern end of the property on the far side of the main entrance. Process wastewater consists of coal washdown water collected in the sumps at the rail car dumper building. The areas that are washed down include building floors, conveyor spillage pans and walkways. There is a dust suppression spray at the rail car dumper building. SB-2 discharges through a pipe spillway (002) to the Monongahela River.

Sedimentation Basin 3 (SB-3) is located near the alternate site entrance and collects all stormwater northeast of the transfer station and along the railroad tracks. This is the largest of the three sedimentation basins. Additionally, any sediment that is dredged from the other sedimentation ponds is piled near the pond bank so that their runoff can be captured. SB-3 receives additional process water from sumps at the equipment maintenance building from the washdown of building floors and mobile equipment. SB-3 discharges through a pipe spillway (003) to the Monongahela River.

Technology-Based Effluent Limitations

Coal pile runoff technology limits

The proposed technology based effluent limitations at Outfalls Nos. 001, 002 and 003 are in accordance with the regulations in 40 CFR 434.25(a). New Source Performance Standards (NSPS) for coal preparation plants and coal preparation plant associated areas. These limits are the same as previous limits and the permittee is in compliance with the permit limits with only a few exceptions (see Table 1).

The results of the samples for Sedimentation Basin 3 are within MSGP limits for all of the parameters listed in permit Modules 4 (Pollutant Group 1) and 5 (Pollutant Group 2) with the exception of nitrogen. The MSGP limit for Nitrate + Nitrite Nitrogen is 0.68 mg/l. The 3 samples from Sedimentation Basin 3 had levels of 3.86 mg/l, 1.10 mg/l and 2.29 mg/l. These levels are attributed to natural sources and not representative of the facility's industrial operations. Since this portion of the Monongahela River is not impaired by nutrients, these elevated Nitrogen levels are not of a concern at this time.

Alicia Dock Compliance

A review of the previous six years of eDMRs yielded six exceedances of permit limits. Permitting has informed Operations of these past violations. There are no open violations in eFACTs.

Table 1 – Permit Limit Exceedances since January 1, 2013

Dates	Outfall	Conc. mg/l	Avg Monthly Limit mg/l	Conc. mg/l	Daily Max. Limit mg/l	Parameter
12-1-17 to 12-31-17	002	41	35	76.0	70.0	TSS
6-1-15 to 6-30-15	003			78.0	70.0	TSS
2-1-13 to 2-28-13	001	40	35			TSS
3-1-13 to 3-31-14	001	3.05	2.0	4.42	4.0	Total Mn

Water Quality-Based Limitations

Toxics Screening Analysis – Procedures for Evaluating Reasonable Potential and Developing WQBELs

DEP's procedures for evaluating reasonable potential are as follows:

1. For IW discharges, the design flow to use in modeling is the average flow during production or operation and may be taken from the permit application.

2. Perform a Toxics Screening Analysis to identify toxic pollutants of concern. All toxic pollutants whose maximum concentrations, as reported in the permit application or on DMRs, are greater than the most stringent applicable water quality criterion are pollutants of concern. [This includes pollutants reported as "Not Detectable" or as "<MDL" where the method detection limit for the analytical method used by the applicant is greater than the most stringent water quality criterion]. List all toxic pollutants of concern in a Toxics Screening Analysis section of the fact sheet (see Attachment B).

3. For any outfall with an applicable design flow, perform PENTOXSD modeling for all pollutants of concern. Use the maximum reported value from the application form or from DMRs as the input concentration for the PENTOXSD model run.

4. Compare the actual WQBEL from PENTOXSD with the maximum concentration reported on DMRs or the permit application. Use WQN data or another source to establish the existing or background concentration for naturally occurring pollutants, but generally assume zero background concentration for non-naturally occurring pollutants.

    - Establish limits in the draft permit where the maximum reported concentration equals or exceeds 50% of the WQBEL. Use the average monthly and maximum daily limits for the permit as recommended by PENTOXSD. Establish an IMAX limit at 2.5 times the average monthly limit.

    - For non-conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL.

    - For conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 10% - 50% of the WQBEL.

The information described above including the maximum reported discharge concentrations, the most stringent water quality criteria, the pollutant-of-concern (reasonable potential) determinations, the calculated WQBELs, and the WQBEL/monitoring recommendations are collected on a spreadsheet titled "Toxics Screening Analysis." (Attachment B). No parameters were selected as pollutants of concern for PENTOXSD modeling, therefore no WQBELs are required based on the water quality analysis.

The analytical data for pollutants-of-concern used in the Toxics Screening Spreadsheet is from the 2006 permit application. Analytical data was only available for Sedimentation Basin #3 (SB-3). There were three sampling events from SB-3. The highest data for each pollutant-of-concern was used in the Toxics Screening Spreadsheet. When using this data in the Toxics Screening Spreadsheet, the current average daily flow from the last thirteen months from SB-3 was used.

Total Maximum Daily Load (TMDL)

Discharges from the site go to the Monongahela River for which the Department has developed a TMDL. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding the water quality criteria for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources in order to restore and maintain the quality of the state's water resources (USEPA 1991a).

The section of the river at the Alicia Docks facility is impaired due to the presence of PCBs and chlordane. No data is available on PCB or chlordane concentrations in this segment of the Monongahela River. Because there are no known sources of either PCB or chlordane, both are treated as nonpoint source contaminants that may be introduced to surface water through contaminated ground water or surface runoff. As a result, the entire TMDLs for both PCB and chlordane in the Monongahela River are assigned to the Load Allocations (LAs); that portion of the load contributed by nonpoint sources. In addition, Murray American does not conduct any activities that are known to generate PCB or chlordane wastewaters.Therefore, no limitations for PCBs or chlordane will be imposed at any of the three outfalls at the Alicia Dock facility based on the Monongahela River TMDL.

Total Dissolved Solids (TDS)

The provisions of Chapter 95.10 were adopted on August 20, 2010 and became effective August 21, 2010. Chapter 95.10 of the Department's regulations establishes the effluent standards applicable to new and expanding discharges of TDS. Under the provisions of this regulation, dischargers that are subject to the requirements of 95.10 must be identified; discharges that are exempt from any treatment requirements under this chapter must be identified; the existing mass loadings of TDS that are exempt from the treatment requirements must be identified and quantified; and discharges of new and expanding mass loadings of TDS must be evaluated.

Integral to the implementation of Chapter 95.10 is the principle that existing, authorized mass loadings of TDS are exempt from any treatment requirements under these provisions. Existing mass loadings of TDS up to and including the maximum daily discharge loading for any existing discharge, provided that the loading was authorized prior to August 21, 2010 are exempt. Generally, no permit actions are required until an NPDES permit is issued, renewed, or amended. Discharge loadings of TDS authorized by the Department are typically exempt from the treatment requirements of Chapter 95.10

until the net TDS loading is increased, an existing discharge proposes a hydraulic expansion or there is a change in the waste stream. If there are existing mass or production based TDS effluent limits, then these are used as the basis for the existing mass loadings.

In accordance with DEP's "*Policy and Procedure for NPDES Permitting of Discharges of Total Dissolved Solids",* existing mass loadings are "the maximum daily discharge loads of TDS or specific conductivity that were authorized by DEP prior to August 21, 2010." Only an increase in net TDS loading is considered to be a new or expanding discharge loading. Discharge loadings of TDS may be authorized by DEP without actual effluent limitations or monitoring requirements having been placed in an NPDES permit. In most cases, discharge TDS data (or in the case of mining operations, specific conductivity and sulfate data) are submitted with the sample results required for permit applications. Upon review of those data, DEP may determine that these loadings do not pose a threat to receiving water quality and thus limitations are not needed. In these cases, the TDS discharge has been authorized, but not limited. Therefore, if TDS (or conductivity) data have been reviewed by DEP as part of an application for an authorized discharge, the discharge loading of TDS has been authorized upon issuance of the permit (or other vehicle), regardless of whether there is an actual limitation or monitoring requirement.

For stormwater that does come into contact with industrial materials, the provisions of Chapter 95.10 are applicable only to the extent that the stormwater has the potential to exceed 2,000 $^{mg}/_{L}$ TDS. The provisions of Chapter 95.10 generally apply only to the final discharge of process wastewater, not intermediate or internal points, except that process wastewater may not be diluted with stormwater or ambient water in order to meet the treatment requirements of Chapter 95.10.

The TDS concentration at outfall 003 is 416 mg/l. The TDS concentration at outfalls 001 and 002 is unknown. The discharge from outfall 003 (as per the previous year's eDMR data) is greater than from outfalls 001 or 002. It is unlikely that the combined discharge from the three sedimentation ponds will be greater than 2,000 mg/l. Therefore, no TDS limits will be imposed.

Anti-Backsliding

Previous limits at outfalls 001, 002 and 003 can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed below in Table 2. The facility is not seeking to revise any of its previously permitted effluent limits.

Table 2: Effluent Limitations and Monitoring Requirements in the Current Permit for Outfalls 001, 002 and 003

Parameter	Effluent Limitations				Monitoring Requirements	
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Required Sample Type
Flow (MGD)	XXX	Monitor and Report	XXX	XXX	XXX	XXX
TSS (mg/l)	XXX	35.0	XXX	70.0	2/month	Grab
Total Iron (mg/l)	XXX	3.0	XXX	6.0	2/month	Grab
Manganese (mg/l)	XXX	2.0	XXX	4.0	2/month	Grab
pH (S.U.)	6.0	XXX	XXX	9.0	2/month	Grab

Table 3: Proposed Effluent Limitations and Monitoring Requirements for Outfall 001

Parameter	Effluent Limitations				Monitoring Requirements	
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Required Sample Type
Flow (MGD)	XXX	Monitor and Report	Monitor and Report	XXX	XXX	XXX
TSS (mg/l)	XXX	35.0	XXX	70.0	2/month	Grab
Total Iron (mg/l)	XXX	3.0	XXX	6.0	2/month	Grab
Manganese (mg/l)	XXX	2.0	XXX	4.0	2/month	Grab
pH (S.U.)	6.0	XXX	XXX	9.0	2/month	Grab

Table 4: Proposed Effluent Limitations and Monitoring Requirements for Outfall 002

Parameter	Effluent Limitations				Monitoring Requirements	
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Required Sample Type
Flow (MGD)	XXX	Monitor and Report	Monitor and Report	XXX	XXX	XXX
TSS (mg/l)	XXX	35.0	XXX	70.0	2/month	Grab
Total Iron (mg/l)	XXX	3.0	XXX	6.0	2/month	Grab
Manganese (mg/l)	XXX	2.0	XXX	4.0	2/month	Grab
pH (S.U.)	6.0	XXX	XXX	9.0	2/month	Grab

Table 5: Proposed Effluent Limitations and Monitoring Requirements for Outfall 003

Parameter	Effluent Limitations				Monitoring Requirements	
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Required Sample Type
Flow (MGD)	XXX	Monitor and Report	Monitor and Report	XXX	XXX	XXX
TSS (mg/l)	XXX	35.0	XXX	70.0	2/month	Grab
Total Iron (mg/l)	XXX	3.0	XXX	6.0	2/month	Grab
Manganese (mg/l)	XXX	2.0	XXX	4.0	2/month	Grab
pH (S.U.)	6.0	XXX	XXX	9.0	2/month	Grab

Final Effluent Limitations

Final limits are determined by comparing Technology and Water Quality-Based Effluent Limitations. Unless water quality criteria may be exceeded, the Technology-Based Effluent Limits are the basis for the permit's final effluent limits. In this case, the technology limits for Outfalls 001, 002 and 003, as shown in Tables 3, 4 and 5 respectively, will be provided in the draft permit as final limits since there are no numerical WQBELs. The limits for this permit renewal are the same as those in the previous permit, which this facility has complied with during the previous permit with only a few exceedances. Therefore, it is expected that the applicant will be able to meet the conditions of the draft permit.

It is recommended that a draft permit be published for public comment in response to this application.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☒	PENTOXSD for Windows Model (see Attachment **C**)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☒	Toxics Screening Analysis Spreadsheet (see Attachment **B**)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☐	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☒	Other: StreamStats (see Attachment A)

Attachments

Attachment A: StreamStats Drainage Area

Attachment B: Toxics Screening Spreadsheet

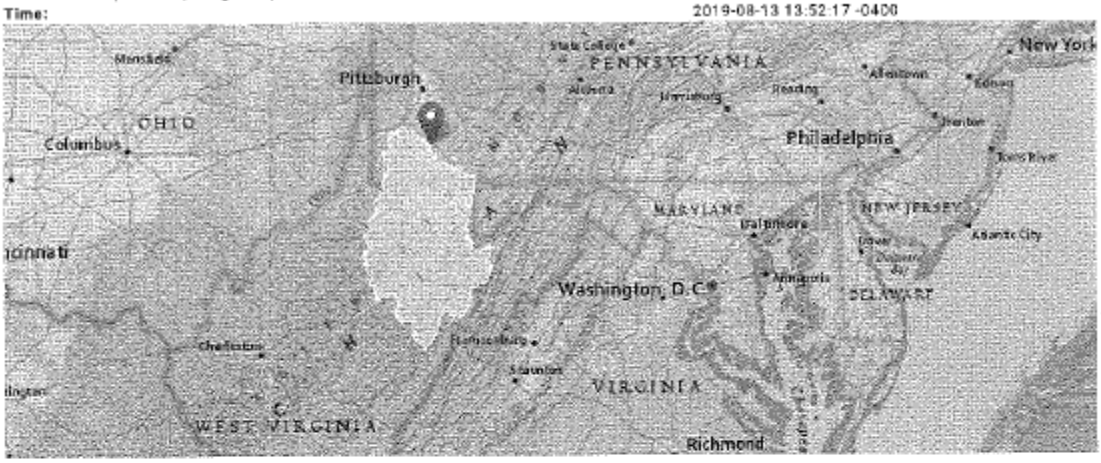
Attachment C: PENTOXSD for Windows Model

Attachment D: Site Map

Attachment A:
StreamStats Drainage Area

StreamStats Report

Region ID:	PA
Workspace ID:	PA20190813175151098000
Clicked Point (Latitude, Longitude):	40.01198, -79.93016
Time:	2019-08-13 13:52:17 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	4970	square miles
ELEV	Mean Basin Elevation	1876	feet

Low-Flow Statistics Parameters[100 Percent (4970 square miles) Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4970	square miles	2.26	1400
ELEV	Mean Basin Elevation	1876	feet	1050	2580

Low-Flow Statistics Disclaimers[100 Percent (4970 square miles) Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report[100 Percent (4970 square miles) Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	663	ft^3/s
30 Day 2 Year Low Flow	883	ft^3/s
7 Day 10 Year Low Flow	382	ft^3/s
30 Day 10 Year Low Flow	450	ft^3/s
90 Day 10 Year Low Flow	673	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H., 2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Attachment B:
Toxics Screening Spreadsheet

TOXICS SCREENING ANALYSIS
WATER QUALITY POLLUTANTS OF CONCERN
VERSION 2.6

Facility: Murray American River Towing, Inc. NPDES Permit No.: PA0216038 Outfall: 003
Analysis Hardness (mg/L): 100 Discharge Flow (MGD): 0.00933 Analysis pH (SU): 7
Stream Flow, Q_{7-10} (cfs): 530

	Parameter		Maximum Concentration in Application or DMRs (µg/L)	Most Stringent Criterion (µg/L)	Candidate for PENTOXSD Modeling?	Most Stringent WQBEL (µg/L)	Screening Recommendation
Group 1	Total Dissolved Solids		467000	500000	No		
	Chloride			250000			
	Bromide			N/A			
	Sulfate		167000	250000	No		
	Fluoride			2000			
Group 2	Total Aluminum		900	750	Yes	1160000	No Limits/Monitoring
	Total Antimony		10	5.6	Yes	92702.71	No Limits/Monitoring
	Total Arsenic		50	10	Yes	165540.5	No Limits/Monitoring
	Total Barium			2400			
	Total Beryllium		1	N/A	No		
	Total Boron			1600			
	Total Cadmium		0.2	0.271	No		
	Total Chromium		50	N/A	No		
	Hexavalent Chromium		10	10.4	No		
	Total Cobalt			19			
	Total Copper		10	9.3	Yes	21664.58	No Limits/Monitoring
	Total Cyanide		5	N/A	No		
	Total Iron		940	1500	No		
	Dissolved Iron			300			
	Total Lead		50	3.2	Yes	52668.25	No Limits/Monitoring
	Total Manganese		110	1000	No		
	Total Mercury		0.1	0.05	Yes	827.703	No Limits/Monitoring
	Total Molybdenum			N/A			
	Total Nickel		40	52.2	No		
	Total Phenols (Phenolics)		1	5	No		
	Total Selenium		50	5.0	Yes	82590.73	No Limits/Monitoring
	Total Silver		10	3.8	Yes	5856.664	No Limits/Monitoring
	Total Thallium		100	0.24	Yes	3972.973	No Limits/Monitoring
	Total Zinc		8	119.8	No		

Attachment C:
PENTOXSD for Windows Model

PENTOXSD

Modeling Input Data

Stream Code	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope	PWS With (mgd)	Apply FC
37185	58.30	744.00	4970.00	0.00000	0.00	☑

Stream Data

	LFY	Trib Flow	Stream Flow	WD Ratio	Rch Width	Rch Depth	Rch Velocity	Rch Trav Time	Tributary Hard	Tributary pH	Stream Hard	Stream pH	Analysis Hard	Analysis pH
	(cfsm)	(cfs)	(cfs)		(ft)	(ft)	(fps)	(days)	(mg/L)		(mg/L)		(mg/L)	
Q7-10	0.1	0	530	0	613	15	0	0	100	7	0	0	0	0
Qh		0	0	0	0	0	0	0	100	7	0	0	0	0

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	AFC PMF	CFC PMF	THH PMF	CRL PMF	Disc Hard (mg/L)	Disc pH
Murray American	PA0216038	0	0.020697	0	0	0	0	0	0	100	7

Parameter Data

Parameter Name	Disc Conc (µg/L)	Trib Conc (µg/L)	Disc Daily CV	Disc Hourly CV	Steam Conc (µg/L)	Stream CV	Fate Coef	FOS	Crit Mod	Max Disc Conc (µg/L)
ALUMINUM	5E+12	0	0.5	0.5	0	0	0	0	1	0
ANTIMONY	5E+12	0	0.5	0.5	0	0	0	0	1	0
ARSENIC	5E+12	0	0.5	0.5	0	0	0	0	1	0
COPPER	5E+12	0	0.5	0.5	0	0	0	0	1	0
LEAD	5E+12	0	0.5	0.5	0	0	0	0	1	0
MERCURY	5E+12	0	0.5	0.5	0	0	0	0	1	0
SELENIUM	5E+12	0	0.5	0.5	0	0	0	0	1	0
SILVER	5E+12	0	0.5	0.5	0	0	0	0	1	0
THALLIUM	5E+12	0	0.5	0.5	0	0	0	0	1	0

Stream Code	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope	PWS With (mgd)	Apply FC
37185	57.10	743.00	4980.00	0.00000	3.00	☑

Stream Data

	LFY	Trib Flow	Stream Flow	WD Ratio	Rch Width	Rch Depth	Rch Velocity	Rch Trav Time	Tributary Hard	Tributary pH	Stream Hard	Stream pH	Analysis Hard	Analysis pH
	(cfsm)	(cfs)	(cfs)		(ft)	(ft)	(fps)	(days)	(mg/L)		(mg/L)		(mg/L)	
Q7-10	0.1	0	530	0	608	15	0	0	100	7	0	0	0	0
Qh		0	0	0	0	0	0	0	100	7	0	0	0	0

Discharge Data

Name	Permit Number	Existing Disc Flow	Permitted Disc Flow	Design Disc Flow	Reserve Factor	AFC PMF	CFC PMF	THH PMF	CRL PMF	Disc Hard	Disc pH
		(mgd)	(mgd)	(mgd)						(mg/L)	
		0	0	0	0	0	0	0	0	100	7

Parameter Data

Parameter Name	Disc Conc	Trib Conc	Disc Daily CV	Disc Hourly CV	Steam Conc	Stream CV	Fate Coef	FOS	Crit Mod	Max Disc Conc
	(µg/L)	(µg/L)			(µg/L)					(µg/L)
ALUMINUM	0	0	0.5	0.5	0	0	0	0	1	0
ANTIMONY	0	0	0.5	0.5	0	0	0	0	1	0
ARSENIC	0	0	0.5	0.5	0	0	0	0	1	0
COPPER	0	0	0.5	0.5	0	0	0	0	1	0
LEAD	0	0	0.5	0.5	0	0	0	0	1	0
MERCURY	0	0	0.5	0.5	0	0	0	0	1	0
SELENIUM	0	0	0.5	0.5	0	0	0	0	1	0
SILVER	0	0	0.5	0.5	0	0	0	0	1	0
THALLIUM	0	0	0.5	0.5	0	0	0	0	1	0

PENTOXSD Analysis Results

Hydrodynamics

SWP Basin	Stream Code:	Stream Name:
19A	37185	MONONGAHELA RIVER

RMI	Stream Flow	PWS With	Net Stream Flow	Disc Analysis Flow	Reach Slope	Depth	Width	WD Ratio	Velocity	Reach Trav Time	CMT
	(cfs)	(cfs)	(cfs)	(cfs)		(ft)	(ft)		(fps)	(days)	(min)
Q7-10 Hydrodynamics											
58.300	530	0	530	0.03201	0.0002	15	613	40.867	0.0576	1.2722	705.613
57.100	530	4.641	525.36	NA	0	0	0	0	0	0	NA
Qh Hydrodynamics											
58.300	1786.5	0	1786.5	0.03201	0.0002	25.603	613	23.943	0.1138	0.6442	316.456
57.100	1786.5	4.641	1781.9	NA	0	0	0	0	0	0	NA

PENTOXSD Analysis Results

Wasteload Allocations

RMI	Name	Permit Number
58.30	Murray American	PA0216038

AFC

Q7-10: CCT (min) 15 PMF 0.145 Analysis pH 7 Analysis Hardness 100

Parameter	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)
ALUMINUM	0	0	0	0	750	750	1810000
ANTIMONY	0	0	0	0	1100	1100	2650000
ARSENIC	0	0	0	0	340	340	820916.9
	Dissolved WQC. Chemical translator of 1 applied.						
COPPER	0	0	0	0	13.439	13.999	33800.23
	Dissolved WQC. Chemical translator of 0.96 applied.						
LEAD	0	0	0	0	64.581	81.645	197128.9
	Dissolved WQC. Chemical translator of 0.791 applied.						
MERCURY	0	0	0	0	1.4	1.647	3976.76
	Dissolved WQC. Chemical translator of 0.85 applied.						
SELENIUM	0	0	0	0	NA	NA	NA
SILVER	0	0	0	0	3.217	3.784	9137.337
	Dissolved WQC. Chemical translator of 0.85 applied.						
THALLIUM	0	0	0	0	65	65	156940

CFC

Q7-10: CCT (min) 705.613 PMF 1 Analysis pH 7 Analysis Hardness 100

Parameter	Stream Conc. (µg/L)	Stream CV	Trib Conc. (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)
ALUMINUM	0	0	0	0	NA	NA	NA
ANTIMONY	0	0	0	0	220	220	3640000
ARSENIC	0	0	0	0	150	150	2480000
	Dissolved WQC. Chemical translator of 1 applied.						
COPPER	0	0	0	0	8.956	9.329	154431.2
	Dissolved WQC. Chemical translator of 0.96 applied.						
LEAD	0	0	0	0	2.517	3.182	52668.25
	Dissolved WQC. Chemical translator of 0.791 applied.						
MERCURY	0	0	0	0	0.77	0.906	14996.03
	Dissolved WQC. Chemical translator of 0.85 applied.						
SELENIUM	0	0	0	0	4.6	4.989	82590.73
	Dissolved WQC. Chemical translator of 0.922 applied.						
SILVER	0	0	0	0	NA	NA	NA

PENTOXSD Analysis Results

Wasteload Allocations

RMI	Name	Permit Number						
58.30	Murray American	PA0216038						
	THALLIUM	0	0	0	0	13	13	215202.7

THH

Q7-10: **CCT (min)** 705.613 **PMF** 1 Analysis pH NA Analysis Hardness NA

Parameter	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)
ALUMINUM	0	0	0	0	NA	NA	NA
ANTIMONY	0	0	0	0	5.6	5.6	92702.71
ARSENIC	0	0	0	0	10	10	165540.5
COPPER	0	0	0	0	NA	NA	NA
LEAD	0	0	0	0	NA	NA	NA
MERCURY	0	0	0	0	0.05	0.05	827.703
SELENIUM	0	0	0	0	NA	NA	NA
SILVER	0	0	0	0	NA	NA	NA
THALLIUM	0	0	0	0	0.24	0.24	3972.973

CRL

Qh: **CCT (min)** 316.456 **PMF** 1

Parameter	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)
ALUMINUM	0	0	0	0	NA	NA	NA
ANTIMONY	0	0	0	0	NA	NA	NA
ARSENIC	0	0	0	0	NA	NA	NA
COPPER	0	0	0	0	NA	NA	NA
LEAD	0	0	0	0	NA	NA	NA
MERCURY	0	0	0	0	NA	NA	NA

PENTOXSD Analysis Results

Wasteload Allocations

RMI	Name	Permit Number						
58.30	Murray American	PA0216038						
	SELENIUM	0	0	0	0	NA	NA	NA
	SILVER	0	0	0	0	NA	NA	NA
	THALLIUM	0	0	0	0	NA	NA	NA

PENTOXSD Analysis Results

Wasteload Allocations

RMI	Name	Permit Number
58.30	Murray American	PA0216038

PENTOXSD Analysis Results

Recommended Effluent Limitations

SWP Basin	Stream Code:	Stream Name:
19A	37185	MONONGAHELA RIVER

RMI	Name	Permit Number	Disc Flow (mgd)
58.30	Murray American	PA0216038	0.0207

Parameter	Effluent Limit (µg/L)	Governing Criterion	Max. Daily Limit (µg/L)	Most Stringent WQBEL (µg/L)	Most Stringent WQBEL Criterion
ALUMINUM	1160000	AFC	1810000	1160000	AFC
ANTIMONY	92702.71	THH	144631.1	92702.71	THH
ARSENIC	165540.5	THH	258269.9	165540.5	THH
COPPER	21664.58	AFC	33800.23	21664.58	AFC
LEAD	52668.25	CFC	82170.94	52668.25	CFC
MERCURY	827.703	THH	1291.349	827.703	THH
SELENIUM	82590.73	CFC	128854.8	82590.73	CFC
SILVER	5856.664	AFC	9137.338	5856.664	AFC
THALLIUM	3972.973	THH	6198.477	3972.973	THH

Attachment D:
Site Map


40 00 37 -79 55 46
Alicia Rd
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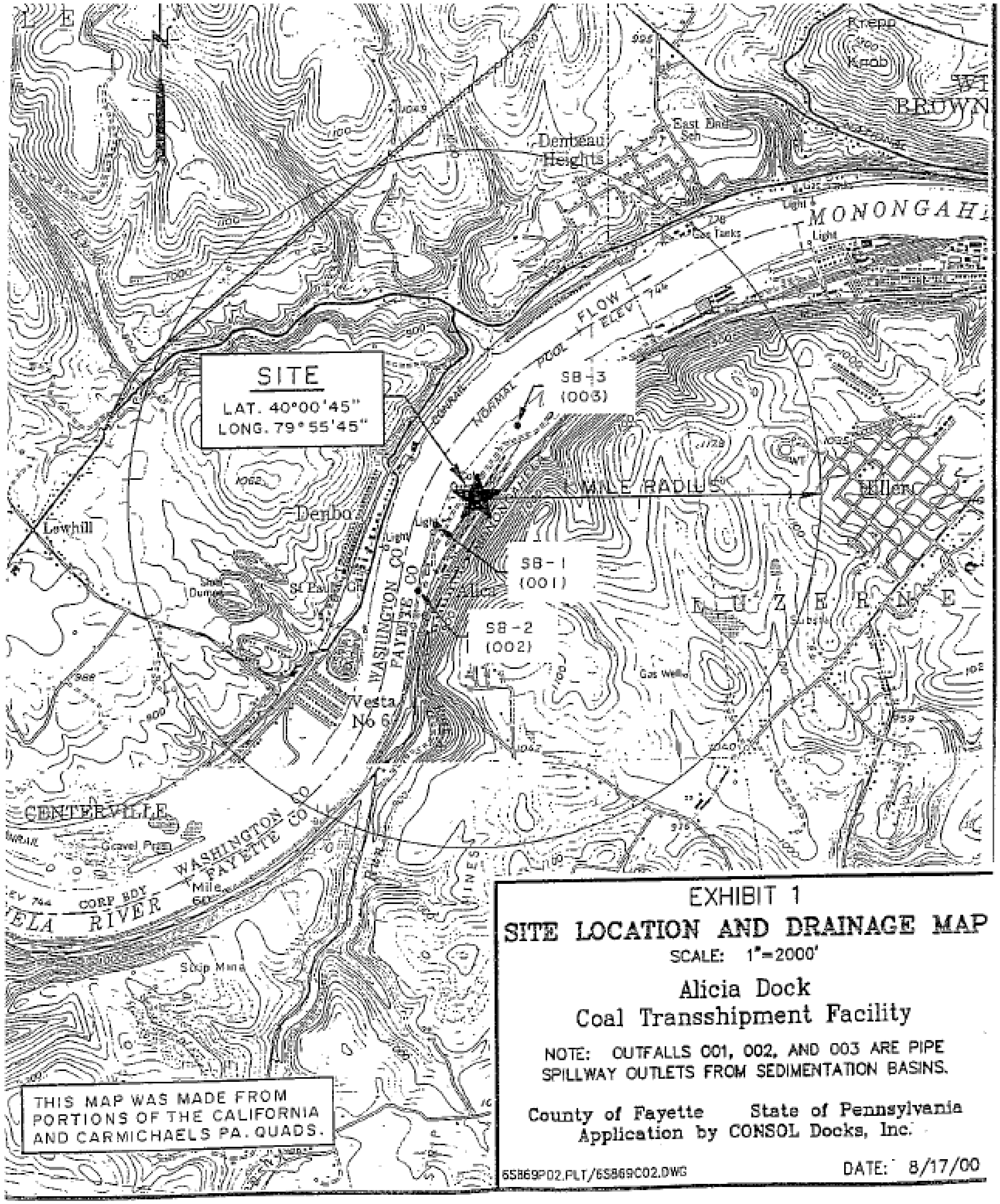
SITE
LAT. 40°00'45"
LONG. 79°55'45"
SB-3
(003)
SB-1
(001)
SB-2
(002)
MILE RADIUS
NORMAL POOL ELEV 744
FLOW
MONONGAH
Krepp Knob
BROWN
East End Sch
Denbeau Heights
Gas Tanks
Light
Denbo
Lowhill
St Pauls Cem
Dumps
Vesta No 6
WASHINGTON CO
FAYETTE CO
L U Z E R N E
Gas Wells
CENTERVILLE
Gravel Pit
RIVER
Strip Mine
THIS MAP WAS MADE FROM PORTIONS OF THE CALIFORNIA AND CARMICHAELS PA. QUADS.
EXHIBIT 1
SITE LOCATION AND DRAINAGE MAP
SCALE: 1"=2000'
Alicia Dock
Coal Transshipment Facility
NOTE: OUTFALLS 001, 002, AND 003 ARE PIPE SPILLWAY OUTLETS FROM SEDIMENTATION BASINS.
County of Fayette State of Pennsylvania
Application by CONSOL Docks, Inc.
65869P02.PLT/65869C02.DWG
DATE: 8/17/00