Pennsylvania Department of Environmental Protection

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0255050**
Facility Type	**Storm Water**	APS ID	**1122432**
Major / Minor	**Minor**	Authorization ID	**1500865**

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

Applicant and Facility Information

Applicant Name	**Philips Respironics, Inc.**	Facility Name	**Murry Ridge Facility**
Applicant Address	1001 Murry Ridge Lane	Facility Address	1001 Murry Ridge Lane
	Murrysville, PA 15668-8517		Murrysville, PA 15668-8517
Applicant Contact	Chris Heitzer	Facility Contact	Same as Applicant
Applicant Phone	(412) 266-8293	Facility Phone	Same as Applicant
Applicant email	chris.heitzer@philips.com	Facility email	Same as Applicant
Client ID	292071	Site ID	810402
SIC Code	3845	Municipality	Murrysville Borough
SIC Description	Electromedical Equipment	County	Westmoreland
Date Application Received	September 23, 2024	EPA Waived?	Yes
Date Application Accepted		If No, Reason	
Purpose of Application	Renewal NPDES Permit Coverage		

Summary of Review

On September 23, 2024, on behalf of Philips Respironics, Inc., CORE Environmental Services, Inc. submitted an application to renew the NPDES Permit PA0255050 for Murry Ridge facility. The Facility has a SIC Code of 3845 (Electromedical Equipment) and North American Industry Classification System Code of 334510 (Electromedical and electrotherapeutic apparatus manufacturing).

The Philips Respironics (RFMR) facility produces medical devices such as medical ventilators and additionally in the same building, Philips produces hospital patient monitoring devices, under roof.

The steel diesel fuel storage tanks are specifically housed at the facility as supply tanks for the facility's emergency power generators. These generators are designed for a non-interrupted electric power supply in the event of an electric power failure from the supply grid to the facility. The fuel tanks contain fuel for continuous operation for up to 48 hours. The generators are designed to be re-fueled during operation. Re fueling occurs on an "as needed" basis from an outside contractor.

The secondary containment of both fuel tanks is constructed in a manner that eliminates the opportunity for outside environmental impact. The tanks are double walled in construction and designed to contain the full volume of the tanks upon catastrophic failure and are not subject to run on or runoff.

The daily average of diesel fuel at the facility is approximately 3.000 gallons. This average may vary slightly depending on the weekly "test start up" of the generators to ensure reliability.

The facility has two outfalls which discharge stormwater only. The facility has no industrial waste discharges to waters of the Commonwealth. Outfall 001 discharges to an unnamed tributary of Humms Run, designated in 25 PA Code Chapter 93 as a

Approve	Deny	Signatures	Date
X		Angela Rohrer / Environmental Engineering Specialist	March 7, 2025
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	March 10, 2025

Summary of Review

Trout Stocking Fishery (TSF). Outfall 002 discharges to an unnamed tributary of Haymakers Run, designated in 25 PA Code Chapter 93 as a High-Quality Cold-Water Fishery (HQ-CWF). Both Outfall 001 and 002 receive stormwater from the facility roofs and paved parking lots. Catch basins are located across the property to direct the stormwater to the outfalls. The property has two buildings, asphalt parking areas, and vegetated areas. The Outfall 001 discharge is from a small drainage basin, Basin A, in the northwest area of the property and the Outfall 002 discharge is from a larger basin, Basin B, in the southeastern corner of the property.

Haymakers Run was designated HQ on October 8, 1979. Construction of the facility was completed in 1990, and therefore the designation was prior to the existence of the facility.

The facility was last inspected by Zachary Flannigan on September 25, 2022, with no violations noted.

The facility has no open violations.

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)	0
Latitude	40º 29' 13.29"	Longitude	-79º 41' 46.18"
Quad Name	Murrysville	Quad Code	1508
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary of Humms Run (TSF)	Stream Code	37389
NHD Com ID	99406886	RMI	0.39
Drainage Area	0.0902	Yield (cfs/mi^2)	0.0048
Q_{7-10} Flow (cfs)	0.000434	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1,194	Slope (ft/ft)	0.036
Watershed No.	19-A	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Turtle Creek Watershed
Nearest Downstream Public Water Supply Intake	PA American Water Co-Pittsburgh (69 MGD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	1,230
PWS RMI	4.65	Distance from Outfall (mi)	25.12

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	40º 29' 06.06"	Longitude	-79º 41' 32.55"
Quad Name	Murrysville	Quad Code	1508
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary of Haymakers Run (HQ-CWF)	Stream Code	37400
NHD Com ID	99406904	RMI	0.55
Drainage Area	0.0391	Yield (cfs/mi^2)	0.0038
Q_{7-10} Flow (cfs)	0.00015	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1,205	Slope (ft/ft)	0.041
Watershed No.	19-A	Chapter 93 Class.	HQ-CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Turtle Creek Watershed
Nearest Downstream Public Water Supply Intake	PA American Water Co-Pittsburgh (69 MGD)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	1,230
PWS RMI	4.65	Distance from Outfall (mi)	

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0 (varied)
Latitude 40º 29' 13.29" **Longitude** -79º 41' 46.18"
Wastewater Description: Stormwater

Technology-Based Limitations

Stormwater Technology Limits

Outfall 001 will be subject to PAG-03 General Stormwater Permit conditions because it discharges stormwater associated with industrial activity. Based on the site's SIC code, the corresponding appendix that would apply to the facility is Appendix J of the PAG-03. The proposed monitoring requirements are shown in Table 1 below. The benchmark values listed below are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two consecutive monitoring periods, the permittee shall submit a Corrective Action Plan. This requirement will be included in Part C of the permit.

Table 1: PAG-03 Appendix (J) Monitoring Requirements

Parameters	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L)	1/6 Months	Calculation	XXX
Total Phosphorus (mg/L)	1/6 Months	Grab	XXX
pH (S.U))	1/6 Months	Grab	9.0
Chemical Oxygen Demand (COD) (mg/L)	1/6 Months	Grab	120
Total Suspended Solids (TSS) (mg/L)	1/6 Months	Grab	100
Oil and Grease (mg/L)	1/6 Months	Grab	30

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharge from Outfall 001 is composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed below in Table 2. These limitations are currently imposed on Outfall 001.

Table 2: Current Effluent Limitation at Outfalls 001

Parameter	Mass Units (lb/day)		Concentrations (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Sample Frequency	Sample Type
Total Suspended Solids	-	-	-	-	Report	-	1/6 months	Grab
Oil and Grease	-	-	-	-	Report	-	1/6 months	Grab

Proposed Effluent Limitations and Monitoring Requirements

Outfall 001 will be subject to the semi-annual monitoring requirements in Appendix J of the PAG-03 General Permit. The proposed effluent monitoring requirements for Outfall 001 are displayed in Table 3 below. A Part C condition is included in the Draft Permit requiring development and submission of a Corrective Action Plan whenever there are two or more consecutive exceedances of the benchmark values, which are also included in the Part C condition. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there are two consecutive exceedances of the benchmark value, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

The PAG-03, NPDES General Stormwater Permit was updated in 2022, incorporating several key changes. Appendix J was updated to include mandatory monitoring for Total Nitrogen, Total Phosphorus, pH and Chemical Oxygen Demand (COD).

Table 3: Proposed Final Effluent Limitation at Outfalls 001

Parameter	Mass Units (lb/day)		Concentrations (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Sample Frequency	Sample Type
Total Nitrogen	Report	Report	-	-	-	-	1/6 months	Grab
Total Phosphorus					Report		1/6 months	Grab
pH (S.U)	-	-	-	-	Report	-	1/6 months	Grab
Chemical Oxygen Demand (COD)	-	-	-	-	Report		1/6 months	Grab
Total Suspended Solids (TSS)	-	-	-	-	Report	-	1/6 months	Grab
Oil and Grease	-	-	-	-	Report	-	1/6 months	Grab

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** 0.0 (varied)
Latitude 40º 29' 06.06" **Longitude** -79º 41' 32.55"
Wastewater Description: Stormwater

Technology-Based Limitations

Stormwater Technology Limits

Outfall 002 will be subject to PAG-03 General Stormwater Permit conditions because it discharges stormwater associated with industrial activity. Based on the site's SIC code, the corresponding appendix that would apply to the facility is Appendix J of the PAG-03. The proposed monitoring requirements are shown in Table 4 below. The benchmark values listed below are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for one monitoring period, the permittee shall submit a Corrective Action Plan. This requirement will be included in Part C of the permit.

Table 4: PAG-03 Appendix (J) Monitoring Requirements

Parameters	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L)	1/6 Months	Calculation	XXX
Total Phosphorus (mg/L)	1/6 Months	Grab	XXX
pH (S.U))	1/6 Months	Grab	9.0
Chemical Oxygen Demand (COD) (mg/L)	1/6 Months	Grab	120
Total Suspended Solids (TSS) (mg/L)	1/6 Months	Grab	100
Oil and Grease (mg/L)	1/6 Months	Grab	30

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharge from Outfall 001 is composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Degradation

Antidegradation regulations under Chapter 93.4c(a)(l)(i) require dischargers to protect the existing use of receiving waters. Chapter 93.4c(b) requires dischargers to consider non-discharge alternatives, public participation and social/economic justification when proposing new, additional or increased discharges to high quality or exceptional value streams. Existing use protection required under Chapter 93.4c(a)(l)(i) is ensured for discharges to high quality streams imposing the most stringent of technology-based, water quality based and non-degrading effluent limitations. To ensure that the discharge does not degrade the stream, the no exposure benchmark values will be used as the benchmark values in the permit. The goal for the permittee is to be consistently below these benchmark values; doing this shows that the discharges are uncontaminated stormwater and will maintain and protect the existing quality of the receiving waters. A Part C condition is included in the Draft Permit requiring a Corrective Action Plan when there is an exceedance of the benchmark values at Outfall 002. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. If there is an exceedance of the benchmark value, a Corrective Action Plan must be developed and submitted to the Department to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed below in Table 5. These limitations are currently imposed on Outfall 002.

Table 5: Current Effluent Limitation at Outfalls 002

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements		Benchmark Value mg/L
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type	
Total Suspended Solids	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	30.0
Oil and Grease	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	5.0

Proposed Effluent Limitations and Monitoring Requirements

Outfall 002 will be subject to the semi-annual monitoring requirements in Appendix J of the PAG-03 General Permit. The proposed effluent monitoring requirements for Outfall 002 are displayed in Table 6 below. A Part C condition is included in the Draft Permit requiring development and submission of a Corrective Action Plan whenever there is one or more consecutive exceedances of the benchmark values. The benchmark values are also displayed below in Table 6. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there is one exceedance of the benchmark value, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

The PAG-03, NPDES General Stormwater Permit was revised in 2022, incorporating several key changes. Appendix J was updated to include mandatory monitoring for Total Nitrogen, Total Phosphorus, pH and Chemical Oxygen Demand (COD).

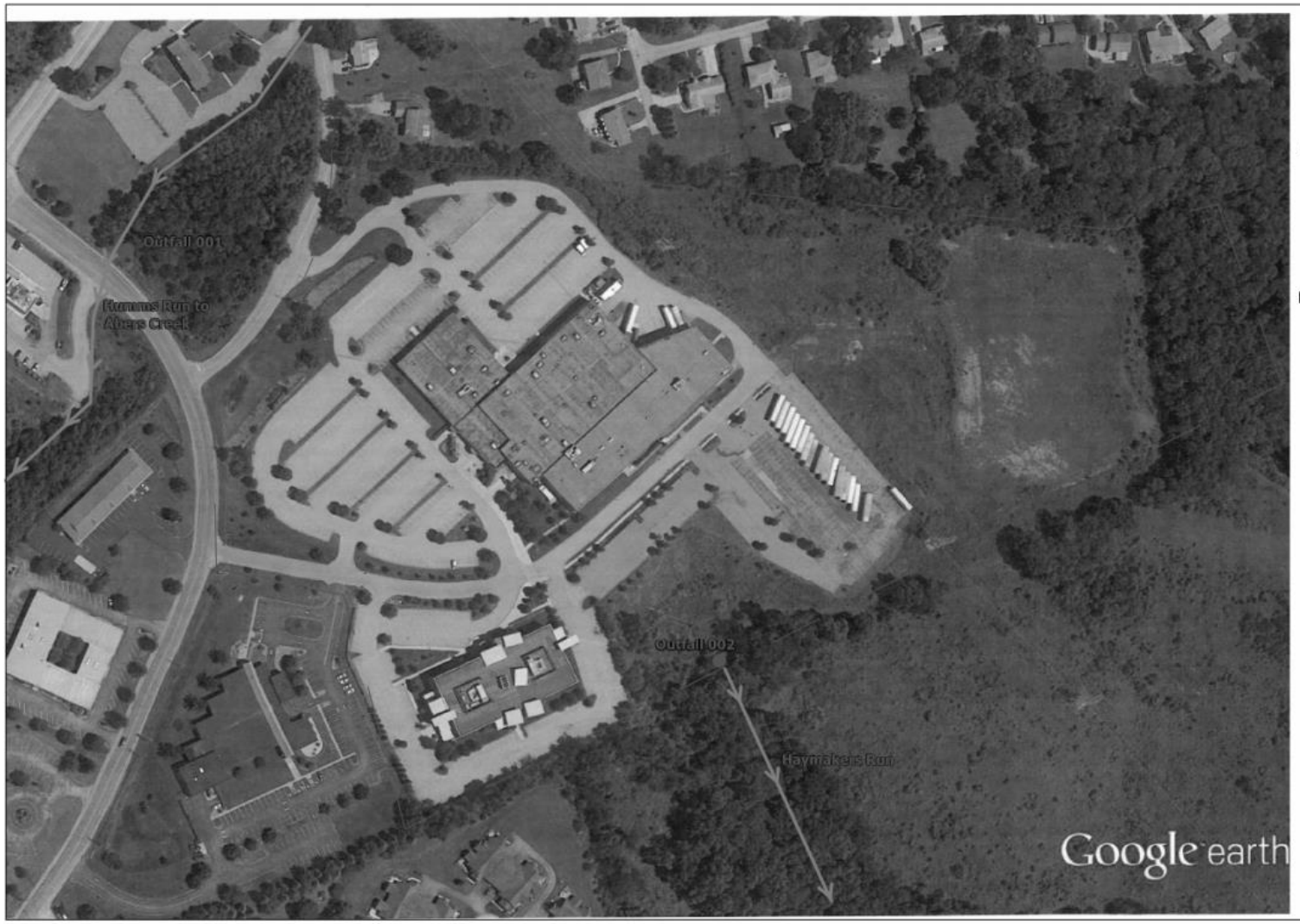
As part of the permit renewal review, the Department identified exceedances of benchmark values for BOD_5, COD, and Total Nitrogen at Outfall 002 in the sample data provided with the application, with concentration levels of 14.6 mg/L, 149 mg/L, and 3.39 mg/L, respectively. Given that the discharge is to a stream designated as High Quality – Cold Water Fish (HQ-CWF), the DEP is adding supplemental monitoring requirements for BOD_5 at Outfall 002, with a benchmark value of 10.0 mg/L, to ensure the stream's quality is maintained. Furthermore, the facility may consider implementing additional Best Management Practices (BMPs) to improve the quality of the discharge from Outfall 002.

Table 6: Proposed Final Effluent Limitation at Outfalls 002

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements		Benchmark Value mg/L
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type	
Total Nitrogen	Report	Report	XXX	XXX	XXX	XXX	1/6 Months	Estimate	2.0
Total Phosphorus	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	1.0
pH (S.U)	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	9.0
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	30.0
Total Suspended Solids (TSS)	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	30.0
Oil and Grease	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	5.0
BOD_5	XXX	XXX	XXX	XXX	XXX	Report	1/6 Months	Grab	10.0

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 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, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 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, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:

ATTACHMENT A.
SITE PLAN



Legend
- Approximate Property Boundary
- Outfall Location
- Stream Flow Direction

Outfall Coordinates
- Outfall 001
  - Latitude 40° 29' 13.29"
  - Longitude -79° 41' 46.18"
- Outfall 002
  - Latitude 40° 29' 6.06"
  - Longitude -79° 41' 32.55"

N
0 90 180
FEET

Map drawn from Google Image

CORE ENVIRONMENTAL SERVICES, INC.

TITLE: SITE MAP
PHILIPS RESPIRONICS
1001 MURRY RIDGE LANE
MURRYSVILLE, WESTMORELAND COUNTY, PENNSYLVANIA

DWN: RM	DES.:	PROJECT NO.: PHR-2015-555
CHKD:	APPD:	FIGURE NO.: 2
DATE: 12/14/15	REV.:	

Attachment B.
StreamStats Report Outfall 001

PA0255050 - Outfall 001 - StreamStats Report

Region ID: PA
Workspace ID: PA20250227155958004000
Clicked Point (Latitude, Longitude): 40.48697, -79.69611
Time: 2025-02-27 11:00:27 -0500

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.0902	square miles
ELEV	Mean Basin Elevation	1256	feet
FOREST	Percentage of area covered by forest	17.5011	percent
PRECIP	Mean Annual Precipitation	39	inches
URBAN	Percentage of basin with urban development	62.516	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0902	square miles	2.26	1400
ELEV	Mean Basin Elevation	1256	feet	1050	2580

Low-Flow Statistics Disclaimers [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 [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00188	ft^3/s
30 Day 2 Year Low Flow	0.00407	ft^3/s

Statistic	Value	Unit
7 Day 10 Year Low Flow	0.000434	ft^3/s
30 Day 10 Year Low Flow	0.00112	ft^3/s
90 Day 10 Year Low Flow	0.0026	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/)

Base Flow Statistics

Base Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	0	percent	0	99
DRNAREA	Drainage Area	0.0902	square miles	2.26	1720
FOREST	Percent Forest	17.5011	percent	5.1	100
PRECIP	Mean Annual Precipitation	39	inches	33.1	50.4
URBAN	Percent Urban	62.516	percent	0	89

Base Flow Statistics Disclaimers [Statewide Mean and Base Flow]

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

Base Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Base Flow 10 Year Recurrence Interval	0.0325	ft^3/s
Base Flow 25 Year Recurrence Interval	0.0285	ft^3/s
Base Flow 50 Year Recurrence Interval	0.0263	ft^3/s

Base 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/)

Application Version: 4.27.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Attachment C.
StreamStats Report Outfall 002

PA0255050 - StreamStats Report - Outfall 002

Region ID: PA
Workspace ID: PA20250227204532271000
Clicked Point (Latitude, Longitude): 40.48410, -79.69208
Time: 2025-02-27 15:46:10 -0500

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.0391	square miles
ELEV	Mean Basin Elevation	1255	feet
FOREST	Percentage of area covered by forest	28.924	percent
PRECIP	Mean Annual Precipitation	39	inches
URBAN	Percentage of basin with urban development	3.0602	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0391	square miles	2.26	1400
ELEV	Mean Basin Elevation	1255	feet	1050	2580

Low-Flow Statistics Disclaimers [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 [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.000726	ft^3/s
30 Day 2 Year Low Flow	0.00163	ft^3/s
7 Day 10 Year Low Flow	0.000155	ft^3/s
30 Day 10 Year Low Flow	0.000424	ft^3/s
90 Day 10 Year Low Flow	0.00103	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/)

Base Flow Statistics

Base Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	0	percent	0	99
DRNAREA	Drainage Area	0.0391	square miles	2.26	1720
FOREST	Percent Forest	28.924	percent	5.1	100
PRECIP	Mean Annual Precipitation	39	inches	33.1	50.4
URBAN	Percent Urban	3.0602	percent	0	89

Base Flow Statistics Disclaimers [Statewide Mean and Base Flow]

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

Base Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Base Flow 10 Year Recurrence Interval	0.0128	ft^3/s
Base Flow 25 Year Recurrence Interval	0.0109	ft^3/s
Base Flow 50 Year Recurrence Interval	0.00989	ft^3/s

Base 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/)