pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0204030**
Facility Type	**Industrial**	APS ID	**740876**
Major / Minor	**Minor**	Authorization ID	**865887**

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

Applicant and Facility Information

Applicant Name	**Calgon Carbon Corp**	Facility Name	**Neville Island West Facility**
Applicant Address	PO Box 717	Facility Address	Neville Island West Plant
	Pittsburgh, PA 15230-0717		Pittsburgh, PA 15225-1519
Applicant Contact	David McAdams	Facility Contact	David McAdams
Applicant Phone	412.787.4793	Facility Phone	412.787.4793
Client ID	66264	Site ID	482007
SIC Code	4226	Municipality	Neville Township
SIC Description	Trans. & Utilities - Special Warehousing and Storage	County	Allegheny
Date Application Received	January 3, 2011	EPA Waived?	Yes
Date Application Accepted	March 18, 2011	If No, Reason	

Purpose of Application: Renewal of NPDES Industrial Waste Permit without ELG.

Summary of Review

The Department received a late NPDES permit renewal application from the Calgon Carbon Corporation for the Neville Island West Facility located in Neville Township of Allegheny County on January 3, 2011. The facility's industrial activities are classified under SIC Code 4226 – Special Warehousing and Storage and 3999 – Miscellaneous Manufacturing Industries.

Primary operations consist of assembly and hydrostatic testing of the vessels prior to loading the vessels with carbon. Wastewater discharges from the facility are intermittent. The facility uses public water supply for the hydrostatic testing water.

The site has one outfall that discharges to the Ohio River, designated in 25 PA Code Chapter 93 as a Warm Water Fisher. Outfall 001 discharges stormwater and hydrostatic test water. The discharge of hydrostatic test waters should not occur at the same time as a storm event so that the testing can be isolated and will not be blended or diluted. The discharge of hydrostatic test water will be regulated at internal monitoring point, IMP 101. There are no other discharges from the site.

The client has no open violations.

Residual waste disposal must meet solid waste regulations.

Part C language in the draft permit provides controls on floating solids, residual solids, Stormwater Discharges, and Total Residual Chlorine.

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

Approve	Deny	Signatures	Date
X		Curtis Holes, P.E. / Environmental Engineer	March 13, 2023
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	March 24, 2023

Summary of Review
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)	0.05
Latitude	40º 30' 18.82"	Longitude	-80º 07' 17.97"
Quad Name	Emsworth	Quad Code	1402
Wastewater Description:	Noncontact Cooling Water (NCCW) and uncontaminated stormwater		

Receiving Waters	Ohio River (Main Channel)	Stream Code	32317
NHD Com ID	99684310	RMI	8.08
Drainage Area	194,000	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	2,365	Q_{7-10} Basis	US Army Corp of Engineers
Elevation (ft)	710	Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use	**Potable Water Supply**	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	DIOXIN, PATHOGENS, POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	**Final (4/9/2001)**	Name	**Ohio River TMDL**

Nearest Downstream Public Water Supply Intake	Robinson Twp. Municipal Authority (6 MGD)		
PWS Waters	Ohio River (Main Channel)	Flow at Intake (cfs)	2,365
PWS RMI	8.8	Distance from Outfall (mi)	0.72

Changes Since Last Permit Issuance: None

Other Comments: None

Drainage Basin

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.05
Latitude	40º 30' 18.82"	Longitude	-80º 07' 17.97"
Quad Name	Emsworth	Quad Code	1402
Wastewater Description:	Noncontact Cooling Water (NCCW)		

Compliance History	
Summary of DMRs:	No exceedances with permit effluent limits.
Summary of Inspections:	The last inspection conducted by the Department was on November 23, 2022 by Shawn Bell with no violations noted.

Other Comments: **None**

Compliance History

DMR Data for Outfall 001 (from February 1, 2022 to January 31, 2023)

Parameter	Limits	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22
Flow (MGD) Average Monthly	**Report**	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130
Flow (MGD) Daily Maximum	**Report**	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130	0.00130
pH (S.U.) Minimum	**6.0**	7.01	7.14	7.75	7.73	7.88	6.77	7.01	7.0	6.69	6.54	6.76
pH (S.U.) Maximum	**9.0**	7.17	7.33	7.25	7.90	7.82	6.85	6.69	7.01	7.33	6.60	6.60
TSS (mg/L) Average Monthly	**30**	20	< 3	6	3	11	< 3	7	< 3	< 3	4	< 3
TSS (mg/L) Instantaneous Maximum	**60**	5	< 3	< 3	< 3	< 3	< 3	< 3	5	5	3	< 3
Oil and Grease (mg/L) Average Monthly	**15**	< 5	< 5	< 3	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Oil and Grease (mg/L) Instantaneous Maximum	**30**	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.05
Latitude 40º 30' 24" **Longitude** -80º 07' 17"
Wastewater Description: Noncontact Cooling Water (NCCW) and uncontaminated stormwater

Technology-Based Limitations

Stormwater Technology Limits

Outfall 001 consists of NCCW and uncontaminated stormwater. Outfall 101 is the monitoring location for the NCCW, which is prior to comingling with uncontaminated stormwater.

Outfall 001 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfall receives stormwater. The industrial activities conducted at the facility corresponding appendix of the PAG-03 that would apply to the facility is Appendix J (Additional Facilities). The reporting requirements applicable to stormwater discharges are shown in Table 1 below. Along with the monitoring requirements, sector specific BMPs included in Appendix J of the PAG-03 will also be included in Part C of the Draft Permit. The benchmark values listed below are not effluent limitation, and exceedances so not constitutes 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	Max Daily Concentration	Benchmark Values
Total Suspended Solids (TSS) (mg/L)	Monitor and Report	100.0
Oil and Grease (mg/L)	Monitor and Report	30.0

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

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 *(l) Reissued permits. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.*

The facility is not seeking to revise the previously permitted effluent limits. The hydrostatic testing water industrial wastewater monitoring requirements are imposed at Outfall 101.

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 001 are displayed in Table 2 below, they are the most stringent values from the above effluent limitation development. Part C of the Draft Permit requires a Corrective Action Plan whenever there are two consecutive exceedances of the stormwater benchmark values. The benchmark values are displayed below in Table 2. 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 a benchmark value, a Corrective Action Plan must be developed and submitted to the Department to evaluate site stormwater controls and implement BMP improvements. Benchmark monitoring is a feedback tool, along with routine and visual inspections, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark value provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

Table 2: Proposed Limitations for Outfall 001

Parameter	Daily Max.	Benchmark Values	Sample Frequency	Sample Type
Flow (GPM)	Report	XXX	1/6 months	Measured
Oil and Grease (mg/L)	Report	30.0	1/6 months	Grab
Total Suspended Solids (TSS) (mg/L)	Report	100.0	1/6 months	Grab

Development of Effluent Limitations

Outfall No.	101	**Design Flow (MGD)**	0.05
Latitude	40º 30' 24"	**Longitude**	-80º 07' 17"

Wastewater Description: Hydrostatic Test Water

Technology-Based Limitations

Hydrostatic test water discharge from carbon filter vessels is also addressed in PAG-10 General Permit, new tank and pipelines. The concentration limits for hydrostatic test water from the general permit are shown in Table 3.

Table 3. Technology based effluent limits for hydrostatic test water

Parameter	Minimum	Average Monthly	Instantaneous Maximum
Flow (GPM)		Report	
Dissolved Oxygen (mg/L)	5.0		
pH (standard units)	6.0		9.0
Total Residual Chlorine (TRC) (mg/L)		Report	0.05
Total Suspended Solids (TSS) (mg/L)		30.0	60.0
Oil and Grease (mg/L)		15.0	30.0
Dissolved Iron (mg/L)			7.0

The source water of the hydrostatic test water is public supply water, therefor TRC Instantaneous Maximum of 0.05 $^{mg}/_{L}$ is imposed.

Water Quality-Based Limitations

A water quality analysis was not performed to calculate water quality based effluent limitations as the discharge water is hydrostatic test water.

Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 *(l) Reissued permits. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.*

The facility is not seeking to revise the previously permitted effluent limits.

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for IMP 101 are displayed in Table 4 below, they are the most stringent values from the above effluent limitation development.

Table 4: Proposed Effluent Limitations at IMP 101

Parameter	Effluent Limitations			Monitoring Requirements	
	Instant. Minimum	Average Monthly	Instantaneous Maximum	Minimum Measurement Frequency	Sample Type
Flow (GPM)	XXX	Report	XXX	2/month	Measured
Dissolved Oxygen (mg/L)	5.0	XXX	XXX	2/month	Grab
pH (S.U.)	6.0	XXX	9.0	2/month	Grab
Total Residual Chlorine (TRC) (mg/L)	XXX	Report	0.05	2/month	Grab
Total Suspended Solids (TSS) (mg/L)	XXX	30	60	2/month	Grab
Oil and Grease (mg/L)	XXX	15	30	2/month	Grab
Dissolved Iron (mg/L)	XXX	XXX	7.0	2/month	Grab

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, 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: