

Southwest Regional Office CLEAN WATER PROGRAM

 Application Type
 New

 Facility Type
 Storm Water

 Major / Minor
 Minor

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

Application No. PA0255572

APS ID 996614

Authorization ID 1279046

Applicant Name	River Materials Inc.	Facility Name	McKeesport Handling Facility
Applicant Address	103 Yost Boulevard Suite 200	Facility Address	275 Center Street
	Pittsburgh, PA 15221		McKeesport, PA 15132
Applicant Contact	Cliff Wise	Facility Contact	Same as Applicant
Applicant Phone	(412) 271-2575	Facility Phone	Same as Applicant
Client ID	350939	Site ID	837358
SIC Code	4491	Municipality	McKeesport City
SIC Description	Marine Cargo Handling	County	Allegheny
Date Application Rece	vived July 1, 2019	EPA Waived?	Yes
Date Application Acce	pted July 3, 2019	If No, Reason	

Summary of Review

The Department received a new NPDES permit application from KU Resources, Inc on behalf of River Materials, Inc for their proposed McKeesport Handling Facility. The McKeesport Handling Facility is an industrial site that will be used for barge onloading, offloading, and storage of coal, gypsum, and limestone.

The site is approximately 18.0 acres bound by the Monongahela River to the north, railroad properties to the east and south, and the industrial center of McKeesport to the west. Historically, the site was a steel manufacturing facility from circa 1870 until 1987. Historic site operations also included various barge loading and offloading activities including Dravo Barge and Frank Bryan Materials. Currently, there are no remaining manufacturing facilities on the property and the site is vacant land.

The site has one proposed outfall, Outfall 001, that will discharge stormwater via the McKeesport MS4 to the Monongahela River, designated in 25 PA Code Chapter 93 as a warm water fishery (WWF). Prior to entering the McKeesport MS4, the stormwater will be collected and treated in a sedimentation basin with multiple baffles. Treatment chemicals in the form of flocculant logs will be used to settle solids in the sedimentation basin. Operation of the sedimentation basin in this manner constitutes a wastewater treatment system. River Materials will need to submit an application for a Water Quality Management Permit to install and operate the treatment system. The stormwater collected in the sedimentation basin is the runoff from the material storage piles.

The permittee has no open violations.

It is recommended that a Draft NPDES Permit be published for public comment in response to this application.

Public Participation

Approve	Deny	Signatures	Date
X		Adam Olesnanik / Enyironmental Engineering Specialist	8-5-19
		Michael E. Fifth, P.E. / Environmental Engineer Manager	8/5/19

Summary of Review

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.

scharge, Recei	ving Waters and Water Supply Info	rmation	
Outfall No. 0	01	Design Flow (MGD)	0
Latitude 40	0° 21' 20.4"	Longitude	-79° 50' 39.9"
Quad Name McKeesport		_ Quad Code	1607
Wastewater Des	scription: Stormwater		
Receiving Wate	rs Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99408094	RMI	14.33
Drainage Area	7180	Yield (cfs/mi²)	0.15
Q ₇₋₁₀ Flow (cfs)	1, 060	Q ₇₋₁₀ Basis	U.S. Army Corps of Engineers
Elevation (ft)	719	Slope (ft/ft)	0.0001
Watershed No.	_19-A	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Sta	itus <u>Impaired</u>		
Cause(s) of Imp	airment Polychlorinated Bipheny	rls (PCBS)	
Source(s) of Imp	pairment Source Unknown		
TMDL Status	<u>Final</u>	Name Monongahe	la River TMDL
	ream Public Water Supply Intake	PA American Water Co-Pittsb	
PWS Waters	Monongahela River	Flow at Intake (cfs)	1,230
PWS RMI	4.6	Distance from Outfall (mi)	9.73

Development of Effluent Limitations				
Outfall No.	001	Design Flow (MGD)	0	
Latitude	40° 21' 20.40"	Longitude	-79º 50' 39.90"	
Wastewater Description: Stormwater				

Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

The site's activity; gypsum, limestone, and coal storage, is similar to material storage piles from cement manufacturing facilities and coal storage piles from steam electric generating facilities; therefore, the outfall is subject to Federal Effluent Limitation Guidelines (ELGs) under 40 CFR 411.32(a) and 423.12(b)(9).

Table 1: Material Storage Pile Runoff ELG

Parameter	Instantaneous Maximum		
Total Suspended Solids (TSS)	50 mg/L		
pH	Within the range of 6.0 to 9.0		

Table 2: Coal Pile Runoff ELG

Parameter	Instantaneous Maximum
Total Suspended Solids (TSS)	50 mg/L

Regulatory Effluent Standards and Monitoring Requirements

Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(d)(1).

Effluent standards for pH are also imposed on industrial wastes by 25 Pa. Code § 95.2(1) as indicated in Table 3.

Table 3: Regulatory Effluent Standards and Monitoring Reguirements for Outfall 021

Parameter	Monthly Average	Daily Maximum	Units
Flow	Monitor and Report		MGD
рH	Not less than 6.0 nor greater than 9.0		S.U.

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.

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 001 are displayed in Table 4 below, they are the most stringent values from the above effluent limitation development.

Table 4: Proposed Effluent Monitoring Requirements

Parameter	Monthly Average	Daily Maximum	Instantaneous Maximum	Measurement Frequency	Sample Type
Flow	Report	Report		1/Month	Estimate
Total Suspended Solids (TSS)			50 mg/L	1/Month	Grab
рН	Between 6.0 and		9.0 S.U.	1/Month	Grab

Tools and References Used to Develop Permit			
WQM for Windows Model (see Attachment)			
 PENTOXSD for Windows Model (see Attachment)			
 TRC Model Spreadsheet (see Attachment)			
Temperature Model Spreadsheet (see Attachment)			
 Toxics Screening Analysis 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:			

Attachments

Attachment A: USGS StreamStats Data

Attachment B: Applicable Federal Effluent Limitation Guidelines

Attachment A: USGS StreamStats Data

StreamStats Report

Region ID:

PA

Workspace ID:

PA20190801171526051000

Clicked Point (Latitude, Longitude):

40.35783, -79.84486

Time:

2019-08-01 13:15:48 -0400



Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	7180	square miles
ELEV	Mean Basin Elevation	1857.2	feet

Attachment B: Applicable Federal Effluent Limitation Guidelines

Subpart C—Materials Storage Piles Runoff Subcategory

♠ Back to Top

§411.30 Applicability; description of the materials storage piles runoff subcategory.

The provisions of this subpart are applicable to discharges resulting from the runoff of rainfall which derives from the storage of materials including raw materials, intermediate products, finished products and waste materials which are used in or derived from the manufacture of cement under either Subcategory—A or B.

★ Back to Top

§411.31 Specialized definitions.

For the purpose of this subpart:

- (a) Except as provided below, the general definitions, abbreviations and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.
- (b) The term 10 year, 24 hour rainfall event shall mean a rainfall event with a probable recurrence interval of once in ten years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

≜ Back to Top

§411.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) Except as provided in §§125.30 through 125.32, and subject to the provisions of paragraph (b) of this section, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

Effluent characteristic	Effluent limitations
TSS	Not to exceed 50 mg/l.
pH	Within the range 6.0 to 9.0.

(b) Any untreated overflow from facilities designed, constructed and operated to treat the volume of runoff from materials storage piles which is associated with a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations stipulated in paragraph (a) of this section.

§423.10 Applicability.

The provisions of this part apply to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, or gas), fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas), or nuclear fuel in conjunction with a thermal cycle employing the steam water system as the thermodynamic medium. This part applies to discharges associated with both the combustion turbine and steam turbine portions of a combined cycle generating unit.

§423.11 Specialized definitions.

In addition to the definitions set forth in 40 CFR part 401, the following definitions apply to this part:

(m) The term coal pile runoff means the rainfall runoff from or through any coal storage pile.

§423.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).

- (a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, utilization of facilities, raw materials, manufacturing processes, non-water quality environmental impacts, control and treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES Permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The phrase "other such factors" appearing above may include significant cost differentials. In no event may a discharger's impact on receiving water quality be considered as a factor under this paragraph.
- (b) Any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction by the application of the best practicable control technology currently available (BPT):

(9) Subject to the provisions of paragraph (b)(10) of this section, the following effluent limitations shall apply to the point source discharges of coal pile runoff:

	BPT effluent limitations
Pollutant or pollutant property	Maximum concentration for any time (mg/l)
TSS	50

(10) Any untreated overflow from facilities designed, constructed, and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event shall not be subject to the limitations in paragraph (b)(9) of this section.