pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0284955**
Facility Type	**Storm Water**	APS ID	**1066746**
Major / Minor	**Minor**	Authorization ID	**1403441**

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

Applicant and Facility Information

Applicant Name	**Gold Bond Building Products, LLC**	Facility Name	**Shippingport Plant**
Applicant Address	2001 Rexford Road	Facility Address	168 Shippingport Road
	Charlotte, NC 28211-3415		Shippingport, PA 15077
Applicant Contact	Trey Jackson	Facility Contact	Same as applicant
Applicant Phone	thjackson@goldbondbuilding.com	Facility Phone	Same as applicant
Client ID	91710	Site ID	464337
SIC Code	3275	Municipality	Shippingport Borough
SIC Description	Manufacturing - Gypsum Products	County	Beaver
Date Application Received	June 28, 2022	EPA Waived?	Yes
Date Application Accepted	July 14, 2022	If No, Reason	

Purpose of Application: NPDES permit coverage of Stormwater associated with Industrial Activities

Summary of Review

The Department received a new Individual NPDES permit application for Industrial Stormwater Discharges from the Gold Bond Building Products, LLC Shippingport Plant on June 28, 2022. The site is currently covered under the PAG-03 General Stormwater permit (PAR216143) but due to the site storing gypsum outdoors uncovered, exposed to precipitation, the site no longer qualifies for the PAG-03 general permit and must apply for the Individual permit.

The facility manufactures raw materials (gypsum) into wallboard. Most of the gypsum that the plant uses is stored in a large dome located behind the manufacturing building. The storage dome is incapable of storing the entire volume of gypsum and some of it is stored outside. This practice of exterior storage is the primary source and concern for contamination of stormwater runoff from the site. The external storage area is bermed, so that all runoff must flow to one corner of the storage area. The runoff first enters a primary settling pond (gypsum sedimentation pond), which has been designed for easy and frequent clean-out. From there the water enters a large sediment pond with an upright “castle” weir. There are no other wastewater discharges from the site.

Stormwater is conveyed from the site by a combination of sheet flow, stormwater drainage channels, and underground piping. Paved areas at the facility are sloped to route run-off into storm drains, which lead to stormwater drainage channels and pipes that drain into two storm water retention ponds and a gypsum sedimentation pond. A site diagram depicting the site stormwater drainage network is in Attachment A of this Fact Sheet. All of the stormwater at the facility is collected in a large retention basin at the front of the building and discharges to Haden Run, designated in 25 PA Code Chapter 93 as a Warm Water Fishery, via Outfall 002.

The site was last inspected on May 28, 2021, no violations were noted. The Permittee has no open violations.

Draft Permit Issuance is recommended.

Approve	Deny	Signatures	Date
X		Adam Olesnanik / Project Manager	7/19/2022
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	7/29/2022

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.	002	Design Flow (MGD)	0
Latitude	40º 37' 43"	Longitude	-80º 25' 11"
Quad Name	Midland	Quad Code	1302
Wastewater Description:	Stormwater		
Receiving Waters	Haden Run (WWF)	Stream Code	33523
NHD Com ID	99681430	RMI	0.36
Drainage Area	2.44	Yield (cfs/mi^2)	0.009
Q_{7-10} Flow (cfs)	0.0224	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	690	Slope (ft/ft)	0.001
Watershed No.	20-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Siltation		
Source(s) of Impairment	Highway/Road/Bridge Runoff (Non-Construction Related), Removal Of Riparian Vegetation		
TMDL Status		Name	

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** 0
Latitude 40º 37' 43" **Longitude** -80º 25' 11"
Wastewater Description: Stormwater

Technology-Based Limitations

Stormwater Technology Limits

Outfall 002 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfall receives stormwater. The SIC code for the site is 3275 (Manufacturing - Gypsum Products) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix N (Glass, Clay, Cement, Concrete and Gypsum Products). The reporting requirements applicable to stormwater discharges are shown in Table 1 below. Along with the monitoring requirements, sector specific BMPs included in Appendix N of the PAG-03 will also be included in Part C of the Draft Permit.

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

Parameter	Max Daily Concentration
pH	Monitor and Report
Total Suspended Solids (TSS)	Monitor and Report
Total Aluminum	Monitor and Report
Total Iron	Monitor and Report

Best Professional Judgment (BPJ) Technology Limitation Analysis

There are no Effluent Limitation Guidelines (ELGs) developed for stormwater discharges from this class of industrial activity. In the absence of any ELG's, technology limitations are developed based on Best Professional Judgment. In order to ensure that adequate BMPs are in place and effective, the Department proposes effluent limitations which are in line with the EPA's stormwater benchmark goals, based on EPA'S 2021 Multisector General Permit (MSGP) document. These values are typical of the Department's PAG-03 Action Levels; above which, permittees are required to reduce their discharge concentrations. A daily maximum Total Suspended Solids limitation of 100 mg/L is proposed, consistent with the MSGP and the PAG-03 benchmark goal. Since the gypsum piles will lack cover and be exposed to precipitation, the facility must achieve an actual effluent limit instead of a benchmark goal. In establishing effluent limitations on a case-by-case basis, various pollutant controls are considered. When evaluating appropriate BPJ limits for a permittee, the Department considers six factors as required by 40 CFR § 125.3.

The six factors are: (1) the age of the equipment and facility, (2) the process employed, (3) the engineering aspects of the application of various types of control technique, (4) process changes, (5) the cost of achieving such effluent reduction and, (6) non-water quality environmental impact (including energy requirements). Factors specific to each level of control technology include costs, pollutant reduction benefits and economic achievability. Each of these factors are discussed below as they relate to the Gold Bond Building Products Shippingport Plant.

1. Equipment and Facility Age – Stormwater pollutants are typically controlled through the implementation of Best Management Practices (BMPs) and housekeeping. Only in rare cases should an industrial wastewater treatment system be considered. Gold Bond Building Products may need to invest resources into specialized pollution control equipment including more sediment covers, catch basin sediment traps and/or structural controls if stormwater discharges from the site are contaminated by the exposed gypsum pile runoff.

2. The Process Employed – As mentioned in the previous paragraph, the Department anticipates compliance with the proposed effluent limitations through implementation of BMPs and housekeeping.

3. Engineering Aspects of Control Techniques – Additional BMPs and/or engineering solutions may be necessary if the facility is unable to meet its proposed effluent limitations. Although immediate BMP pollutant controls including sediment covers, increased frequency of changing covers and booms at catch basins, and more frequent street sweeping may be achieved without an engineer, additional structural solutions may require engineering design

expertise. If a treatment system is necessary to meet the effluent limits, the Department and Gold Bond Building Products will evaluate the engineering aspects of the project at that time.

4. Process Changes – There are no proposed operational changes at the site.

5. The Cost of Achieving Effluent Reduction – Compliance with the proposed effluent limitations is likely achievable through implementation of BMPs and housekeeping. As such, any expenses associated with BMP implementation are minimal.

6. Non-Water Quality Environmental Impacts (Including Energy Requirements) – There are no known non-water quality environmental impacts or energy requirements associated with the installation of BMPs. The proposed effluent limits are appropriate and attainable using widely available BMPs and housekeeping measures.

The proposed 100 mg/L TSS effluent limitation is readily achievable using a combination of site-specific BMPs and general housekeeping procedures such as the utilization of sediment covers over catch basins, increased frequency of changing covers and booms at the catch basins and outfall, removal of solids from the sedimentation basin, and street sweeping, silt fencing, and sediment traps. If Gold Bond Building Products is unable to meet the TSS effluent limitation, the construction of additional sedimentation technologies may be necessary.

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 002 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

The limitations in the site's current permit, PAR216143, can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed in Table 2 below.

Table 2: PAR216143 Monitoring Requirements

Parameter	Max Daily Concentration
pH	Monitor and Report
Total Suspended Solids (TSS)	Monitor and Report
Total Aluminum	Monitor and Report
Total Iron	Monitor and Report

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 002 are displayed in Table 3 below, they are the most stringent values from the above effluent limitation development.

Table 3: Proposed Effluent Monitoring Requirements

Parameter	Daily Maximum (mg/L)	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	100.0	1/6 Months	Grab
Total Aluminum	Report	1/6 Months	Grab
Total Iron	Report	1/6 Months	Grab
pH (S.U.)	Report	1/6 Months	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:

ATTACHMENT A: Site Plan