

**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL ENFORCEMENT
INDUSTRIAL STORMWATER FACILITY INSPECTION REPORT**

Facility Name: Rockwool USA, Inc. RAN-5 Facility		Permit /Reg. #: WV0111457 WVG611896	Expiration Date: 9/12/24
Permittee: Roxul USA Inc.			
Site Representative /Title: Ken Cammarato VP, General Counsel			
Location: Kearneysville		Entry Date / Time: 7/7/21 1:15 pm	
County: Jefferson		Exit Date / Time: 7/7/21 2:45 pm	
Address /Phone: 665 Northport Avenue Kearneysville, WV 25430	Regular Mail: <input checked="" type="checkbox"/> Certified Mail: <input type="checkbox"/>	Photos: <input checked="" type="checkbox"/>	Samples: <input type="checkbox"/>
	Tracking #		

*Rating: S-Satisfactory M-Marginal U-Unsatisfactory N/A-Not Applicable N/O-Not Observed N/D-Not Determined This Visit Y-Yes N-No

FACILITY EVALUATION:

Site Review		Rating		Plans and Records	Rating
1	General Housekeeping	S	11	GPP/SWPPP Retained On Site	Y
2	Solid Waste Disposal	N/D	12	GPP/SWPP Plans Reflect Permit Requirements	M
3	Control Structures and BMPs	S	13	Employee Training Records	Y
4	Outside Materials Storage	S	14	Maintenance and Inspection Schedule	N/O
5	Non-Stormwater Discharge	N/D	15	Site Inspection Records	Y
6	Oil/Water Separator	N/O	16	Spill Response Procedures/Reporting	Y
7	Operations and Maintenance	S	17	GPP/SWPPP Modified if Necessary	N/D
8	Chemical Storage and/or Secondary Containment	S	18	Discharge Monitoring Reports	M
9	Representative Sampling	N/D	19	Other	-
10	Unpermitted Outfalls	N/D	20	Other	-

OUTLET EVALUATION:

Outlet Number	001	002								
Appearance	N/O	N/O								
Marker	S	S								
Receiving Stream	N/O	N/O								

Overall Facility Rating:
Satisfactory

Compliance Outcome:
No Violations

NOVs issued:
None

COMMENTS: Rockwool is an insulation manufacturing facility. Rockwool is listed as sector E-2 under the Multi Sector Stormwater permit. Arrived at the guard gate at the entrance of the facility. A couple minute notice was provided to Ms. Stacey Phillips, Environmental Specialist, of the visit by phone. Ms. Phillips met us (Keith Allison, WVDEP) at the guard gate. The purpose of the visit was explained for the Multi Sector Permit. We walked to a forebay pond, beside the guard gate. There was a person cleaning the front part of the pond with a water hose. It was explained Rockwool pumped water from the "reuse" pond to the front part of this pond for temporary storage, until the reuse pond was cleaned. After the cleaning of the "reuse" pond, the water was pumped back and the employee was in the process of cleaning the pond. The valve from this forebay pond was broken and was preventing any discharge from this pond to outlet 001. The parts are on order. Outlet 002 discharges from the Bioretention at the parking lot. The "reuse pond" collects stormwater from the outside storage area (Material storage area, oil water separator at the fuel pump) to be used in the manufacturing process, per Rockwool Staff. The facility converted the construction stormwater outlets and ponds over to the Multi Sector stormwater outlets. Facility is covered under the construction permit, registration number WVR108876, too.

The facility had just started production. A brief review of the eDMR, training and water inspection documents was performed. The eDMR for outlet 001 was submitted and no flow reported for outlet 002. A brief review of

the SWPPP/GPP was performed and found a couple of concerns: 1. Spill Reporting: facility should review WV Code of State Regulations 47CSR11-2 and/or Appendix A Section III.IV in the permit; All spills are to be reported to WVDEP. (see attachment) 2. The plans reference operations during construction phase.

It should be noted, Rockwool has submitted an updated SWPPP/GPP to WVDEP for approval, prior to this visit. The drawings submitted in the current SWPPP/GPP do not show the current outlay and are being revised with as built drawings.

Inspector:

Michael Kanehl



Telephone:

304-822-7266

Pictures



Rockwool Facility

**Stormwater Pond
Outlet 001**



Forebay pond discharges to outlet 001



Outlet 001



Outlet 001 with sign

**Stormwater Pond
Outlet 002**



Bio Retention at the front parking lot



Outlet 002

**Reuse Pond
No Outlet drainage area**



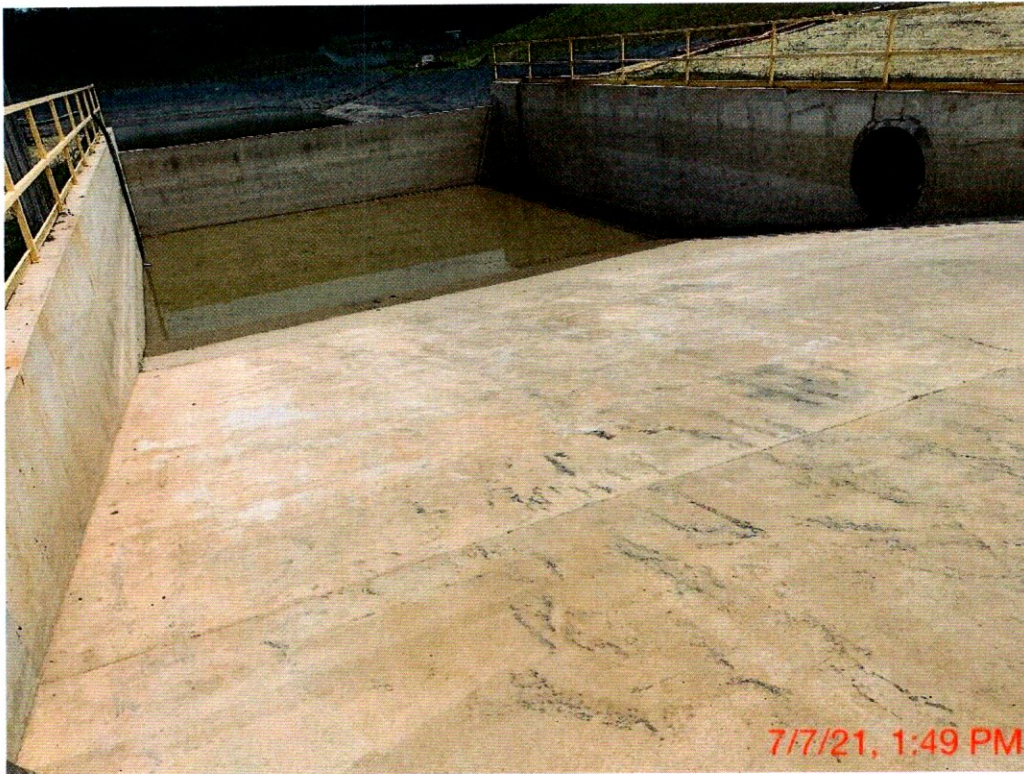
Street Sweeper



Storage area



Reuse Pond



Forebay of the reuse pond



Fluid leak from loader



Storage of Hazardous Waste in a roll off container

**TITLE 47
LEGISLATIVE RULES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER RESOURCES**

**SERIES 11
SPECIAL RULES**

Editor's Note: Previously filed under Water Resources Board Title 46, Series 3.

§47-11-1. General.

1.1. Scope. -- These rules establish requirements governing pollution control measures which are considered special situations that are not generally covered in the Environmental Quality Board's legislative rule, 46CSR1, and the Office of Water Resources' legislative rule, 47CSR10.

1.2. Authority. -- W. Va. Code §22-11 et seq.

1.3. Filing Date. -- June 30, 1987.

1.4. Effective Date. -- July 1, 1987.

§47-11-2. Reporting spills and accidental discharges.

2.1. It is recognized that spill and accidental discharges of sewage, industrial wastes and other wastes are contrary to the language and intent of the State Law and Federal Law and that these spills and accidental discharges may occur from time to time, notwithstanding efforts to prevent them.

2.2. It is further recognized that such spills and discharges are likely to have adverse effects upon the quality of the waters of the state impairing existing and future uses of those waters. The Environmental Quality Board hereby declares it mandatory that, in order to minimize the adverse effects which the above described occurrences may have upon users of waters of the state, the following procedures shall be followed:

2.2.a. Each and every person who may cause or be responsible for any spill or accidental discharges of pollutants into the waters of the state shall give immediate notification to the Office of Water Resources' Emergency Notification Number 1-800-642-3074.

2.2.b. Such notification shall set forth insofar as possible and as soon thereafter as practical the time and place of such spill or discharge, type or types and quantity or quantities of the material or materials therein, action or actions taken to stop such spill or discharge and to minimize the polluting effect thereof, the measures or measures taken or to be taken in order to prevent a recurrence of any such spill or discharge and such additional information as may be requested by the . Office of Water Resources. A written verification of such notification shall be submitted upon request of the . Office of Water Resources.

2.2.c. It shall be the responsibility of each industrial establishment or other entity discharging directly to a person to have available the following information pertaining to those substances that are employed or handled in its operation in sufficiently large amounts as to constitute a hazard in case of an accidental spill and discharge into a public stream.

2.2.c.1. Potential toxicity in water to man, animals and aquatic life;

2.2.c.2. Details on analytical procedures for the quantitative estimation of such substances in water; and

**TITLE 47
LEGISLATIVE RULES
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER RESOURCES**

**SERIES 58
GROUNDWATER PROTECTION RULE**

'47-58-1. General.

1.1. Scope. -- This rule establishes a series of practices which must be followed by any person who owns or operates facilities or conducts activities subject to the provisions of W. Va. Code '22-12-1 et seq. and is subject to regulation by the Division of Environmental Protection's Office of Waste Management or Office of Water Resources.

1.2. Authority. -- W. Va. Code '22-12-5(d).

1.3. Filing Date. -- May 13, 1994 .

1.4. Effective Date. -- June 1, 1994.

'47-58-4. Groundwater Protection Practices For Industrial Establishments.

4.1. Where the evaluation of an existing facility reveals that contamination is occurring, a schedule of compliance must be submitted by the facility or activity and approved by the director whereby the facility or activity must retrofit or improve or discontinue existing systems, activities, or procedures to make them, to the satisfaction of the director, protective of groundwater.

4.2. Subsurface borings (e.g., water wells, injection wells, soil boring, production wells, extraction wells, exploratory wells and groundwater monitoring wells) shall be constructed, operated and closed in a manner that protects groundwater.

4.3. Outside Material Storage or Disposal Areas

4.3.a. Existing areas used for outdoor, non-containerized storage or disposal of raw materials, products or waste shall be evaluated for their potential to contaminate groundwater. Where substantial potential exists, the areas shall have runoff/infiltration control systems. Placement of groundwater monitoring stations may be necessary to determine if contamination has occurred or is occurring.

4.3.b. New areas used for storage or disposal of raw materials, products or wastes shall be designed, constructed and operated to prevent release of contaminants to the groundwater, using liner systems if necessary. Groundwater monitoring stations may be necessary to assure protection of the groundwater resource.

Note: 47CSR11 requires all spills and accidental discharges to be reported by calling 1-800-642-3074.

4.4. Loading and Unloading Areas; Distribution and Bulk Facilities.

4.4.a. Loading and unloading stations including but not limited to drums, trucks and railcars shall have spill prevention and control facilities and procedures as well as secondary containment, if appropriate or

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- Spill Response Plan
 - SPRP
 - GPP
 - SPCC Plan
 - Facility Standard Operating Procedures
 - Evacuation Plan.

7.5 Release Reporting Procedures

In the event of a reportable quantity release, the Supervisor for Melting Area, SHEQ Leader, or Environmental Technical working on behalf of the SHEQ Leader will immediately notify the appropriate external agencies. The procedures that will be followed to make the required notifications are as follows:

1. The Supervisor for Melting Area or designated person will assess the release and notify the Director of Operations and SHEQ Leader.
2. The Supervisor for Melting Area, in consultation with the SHEQ Leader and senior facility management, will take the appropriate action to mitigate the emergency and inform appropriate staff, management, and regulatory agencies.
3. If a release has reached or has the potential to reach storm water discharge or leave the site, and:
 - ⇒ Any quantity of petroleum product resulting in a sheen; or
 - ⇒ A release of a hazardous substance to the environment that exceeds the substance's reportable quantity as designated in 40CFR, Part 302.

The following will be notified immediately:

- ⇒ West Virginia Department of Environmental Protection (WVDEP) at 304-926-0499 or 800-642-3074;
- ⇒ The National Response Center at 800-424-8802;
- ⇒ The Local Emergency Planning Committee at 304-729-3290 or 304-728-9221; and
- ⇒ Jefferson County Local Emergency Agencies at 911.

The Spill Notification Form shown in *Appendix E* can be completed when a regulatory agency is notified of a release. Emergency phone numbers are located in *Appendix F—Contact List and Notification Phone Numbers*.

7.6 Emergency Response Information

Detailed Emergency Response information is included in the separate SPRP. Personnel with duties and responsibilities for developing, implementing, and maintaining the facility's SWPPP include:

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- c. Review of historical local data from Martinsburg Airport for past 20 years and selecting the largest 7 day cumulative rainfall of 6.6 inches.
 3. ROCKWOOL will initiate contact with emergency storage tank services within a approximately 100 miles of the Rockwool facility in the event that freeboard is less than 1 foot. The names and contact numbers of three vendors have been added to the Plan. ROCKWOOL will use temporary holding tanks (holding up to 21,000 gallons) to contain the excess volume of water. If a volume of water is collected that cannot be feasibly used by the facility, water would be sampled and then trucked to a local POTW or privately owned industrial treatment plant based on sampling results.
 4. In the highly unlikely occurrence of an overflow condition, storm water from the Rainwater Reuse Pond will be captured by Outlet 001. ROCKWOOL will initiate sampling of this Outlet in the event an overtopping condition appears imminent.

5.3.2 Operation of Stormwater Ponds During Construction and Installation

After the completion of construction of buildings and stabilization of outside surfaces with asphalt, pavement or vegetation, the installation phase of the stormwater system will commence. During this phase, remaining equipment is brought on-site and installed. In the interim period between construction and operation, there will be no use for stormwater collected in the Rainwater Re-Use Pond. As this pond has no outlet, the facility will plan to:

1. Close any drop inlets to minimize water discharged to the Rainwater Re-Use Pond. This will be accomplished with temporary barriers and/or cover mats. Water collected on outside areas will then be pumped from low areas to the stormwater pond.
2. Pump water from the settlement forebay into the Stormwater Management Pond will discharge through Outlet 1.

This operation is suggested to continue until manufacturing materials (binder components and maintenance supplies including oils) are brought on site. Melted raw materials, such as stones or slags, may be brought on site and stored in the covered raw materials buildings earlier than start-up of production. Any dust on outside areas related to unloading will be swept off and the closest drain inlets to the unloading area will be covered.

During plant operation start-up that will last approximately three months, use of rainwater is limited to the reduced operational hours. Sampling and analysis of water in the Rainwater Re-Use Pond will be done as basis for decision to pump to stormwater basin for discharge via Outlet 1.

5.3.3 Preventive Maintenance

Preventive maintenance at this facility is accomplished by an integrated Preventative Maintenance program. This program institutes the type of inspection or testing that is designated for a storage tank or piece of equipment, procedures that are in place for the inspection, the frequency of inspection or testing to be conducted, and the documentation and storage of this information. As part of this program, formal and informal visual inspections of the process equipment, storage areas and BMPs are performed throughout the facility's operations and activities.

5.3 Operation and Maintenance

5.3.1 Operational Controls for Rainwater Re-Use Pond

The Rainwater Re-Use Pond collects the facility stormwater from areas outside the manufacturing buildings, within a 14.7 acre drainage area. The stormwater from this area could contain dust from handling of raw materials for the melting process, which would include solid materials such as stones, slags and melt for reuse items. Coal is received as milled coal, in closed tank trucks, and transferred pneumatic into silos, and transported in closed, pneumatic external piping to the furnace, so contact with stormwater is not anticipated.

The Rainwater Re-Use Pond has been designed for large storm events (e.g., a design criteria of 100 year storm event) so that water within the Rainwater Re-Use Pond does not overflow. Additionally, a three-component geosynthetic liner system, which includes a 60 mil HDPE liner and geosynthetic clay layer, has been designed to prevent infiltration of water into groundwater resources. If there is a large storm event or large duration storm events in combination with production stops for maintenance, the RAN-5 Facility will employ an emergency action plan, which would for example use temporary water tankers to haul off water collected in the Rainwater Re-Use Pond.

Water from the Rainwater Re-Use Pond is filtered via a sand filter and treated with UV light before use. Backwash from the sand filter, which only treats rainwater from the Rainwater Re-Use Pond, is piped to the Rainwater Re-Use Pond. The treated rainwater is used as process water for different operational needs.

Process water is used mainly for binder application. Process water is completely contained inside buildings for the melting and spinning processes. In-ground sumps are located at strategic locations for containment of this process water. Any overflow from tanks or internal water treatment processes (i.e., filtration) will be collected in trenches and sumps and pumped back into tanks. Process water is re-circulated for repeated use within the manufacturing process building until eventually evaporated.

Rainwater is the primary water source for production, while city water is supplied for civil and sanitary use, and used as back up for industrial demand. City water is treated in a separate system which discharges effluent to the City of Charles Town WWTP.

General Operating Principles

The general operating principles for the Rainwater Re-Use Pond are presented in the list below.

1. The normal operating level of the Rainwater Reuse Pond will be approximately 2.5 ft. Normal fluctuations in pond level are expected to be +/- 2.5 feet. Reuse of collected rainwater is preferable to purchase of potable water so will typically be used as it is collected.
2. The Rainwater Reuse Pond has been designed to accommodate a variety of storm events assuming the normal operating level of 2.5 feet and occurring during a plant shut down with no water withdrawal while maintaining a reasonable freeboard ranging from 1 to 2 feet. These include:
 - a. NOAA 100 year 24 hour storm event of 6.6 inches.
 - b. Review of historical local data from Martinsburg Airport for past 20 years and selecting the largest 15 day cumulative rainfall of 8.3 inches.

Stormwater Management Pond and Associated Drainage Area:

Within DA-A, water drains to the SWM Pond. Potential areas of risk, shown on *Figure 2A*, with the potential to end up in stormwater include: the trailer storage area, access roads into and out of the facility, the parking lot, the office building and warehouse, and the concrete truck loading dock for finished products. In the unlikely event of a release, in one of these areas, there are several controls in place. BMPs are in place in the path of the stormwater that will improve quantity and attenuate flow. These BMPs include Level 2 Water Quality Swales, Level 1 Bioretention Areas, Oil/Water Separators, and Flexstorm Pure Filter Bags. Spill containing kits are regularly in place and maintained in these areas, and loading and unloading is attended.

The SWM Pond is regularly inspected for the presence of sheen and oil at the surface. As previously noted, the Pond is lined with a three-component geosynthetic liner system to prevent infiltration to groundwater and aid in stabilization of pond subgrade. The outlet of the SWM Pond has been designed with a rise structure to control varying storm frequencies. Material may be skimmed off of the water and/or the material is pumped into containers for appropriate recovery or disposal. As an added protection, a gate valve is installed in the outlet pipe as a safety feature and can shut off water flow to prevent release material from leaving the site. Based on the engineering controls and secondary safety systems present, and given that manufacturing process area will not be in contact with stormwater in this drainage area, the potential risk of release of material to groundwater is considered very low.

Bioretention Area and Associated Western Drainage Area:

The western drainage area to the Bioretention Area does not have drainage from the manufacturing process areas. Additionally the vast majority of the land cover is grass/shrub. The Bioretention Area is a Level 1 BMP, which means infiltration is not promoted and discharge occurs through underground drainage to a concrete outlet apron designed to discharge at sheet flow and non-erosive velocities. Given the land cover and that no process areas are associated with this drainage area, the potential risk of release of material to groundwater is considered very low.


Treatment Effluent Water:

Effluent water from treatment of city water that ends up in sewer to public treatment plant is periodically tested before joining the effluent line to the sanitary sewer. Given controls within the facility, periodic testing and nature of the effluent, the potential risk of release of deleterious material to groundwater is considered very low.

4.4.1 Manufacturing Facilities (4.11.b.1)

As noted previously, contact stormwater is contained within DA-B, shown on *Figure 3*, and ultimately drains to the Rainwater Re-Use Pond. Process water is kept within the manufacturing building and at no point is process water released with stormwater from this facility.

Chemicals in this facility are stored in various states as gas, liquid, and solids. The materials are stored at ambient temperature and pressures, with the exception of the thermal oil tanks. These systems will operate at a maximum temperature of 230° Celsius and are not pressurized vessels. Process areas are built on concrete slabs and are mostly contained within the manufacturing building. Details pertinent to the manufacturing process including sumps, storage tanks and containers, loading/unloading, piping, and underdrain systems are relayed in subsequent sections.

	Procedure	No: EV1-1.03b
	Environmental	Issued: 20/11/2020
	Visual Monitoring Form and Guidelines for Stormwater Discharges	Issued by: Environmental Specialist
		Page: 4 of 5

Visual Monitoring Form

Facility Name: Rockwool-RAN 5

Sampler's Name: Rebecca Powell

Facility Address: 665 Northport Avenue

MSGP Permit Number: WV0111457

Kearneysville, WV 25430

72 Hours since last Qualifying Storm? Yes (circle) Measurable Discharge from Outfall? Yes (circle)

Outfall Number	001	002
Observation Time	3:15 AM	8:25 AM
Established time from Onset of Discharge		N/A
Discharge Type (rain, snow melt or ice melt)	Rain	
Sample Volume (ml)	32oz (946ml)	
Colour	light brown/yellow	
Odour	Fishy	
Clarity	Cloudy	
Floating Solids*	None	
Settled Solid*	Slight	
Suspended Solid*	Slight	
Foam	None	
Oil Sheen	None	
Possible Source of any observed Contamination	Sediment	

*Enter a description of corresponding criteria for each outfall and any corrective actions in the General Comments section of this document.

Name: Rebecca Powell

Date: 3/18/2021

Signature: [Handwritten Signature]

Date: 3/18/2021