

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

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

Application No. PA0013552
APS ID 1141191
Authorization ID 1533603

Applicant and Facility Information

Applicant Name	<u>Hercules Cement Co. LLC Dbu Buzzi Unicem USA</u>	Facility Name	<u>Hercules Cement Dbu Buzzi Unicem USA Stockertown Plant</u>
Applicant Address	<u>501 Hercules Drive PO Box 69 Stockertown, PA 18083-7009</u>	Facility Address	<u>501 Hercules Drive Stockertown, PA 18083-7009</u>
Applicant Contact	<u>Radoslav Slavov</u>	Facility Contact	<u>Radoslav Slavov</u>
Applicant Phone	<u>(610) 759-6300</u>	Facility Phone	<u>(610) 759-6300</u>
Client ID	<u>148852</u>	Site ID	<u>508399</u>
SIC Code	<u>3241</u>	Municipality	<u>Stockertown Borough</u>
SIC Description	<u>Manufacturing - Cement, Hydraulic</u>	County	<u>Northampton</u>
Date Application Received	<u>June 30, 2025</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 3, 2025</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of existing NPDES permit to discharge stormwater and non-contact cooling water.</u>		

Summary of Review

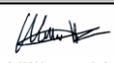
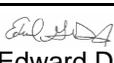
The applicant is requesting to renew an existing NPDES permit to discharge stormwater associated with industrial activity and non-contact cooling water to Bushkill Creek, a High Quality-Cold Water Fishes, Migratory Fishes receiving water in PA State Water Plan Basin 1-F (Jacoby – Bushkill Creeks). As per the Department's current existing use list, the receiving streams do not have an existing use classification that is more protective than their designated use. The discharge is not expected to affect public water supplies.

The receiving stream is impaired by pathogens. This discharge is not expected to add to this impairment.

The facility is a cement manufacturing facility. The site contains a 48-acre plant area that includes multiple office and plant structures pertaining to the cement manufacturing process, a 9-acre shipping area, and large mining and quarry areas. The mining areas are covered under NPDES Mining Permit PA0118460, which according to DEP software is currently undergoing the renewal process.

There are currently five (5) active outfalls for this facility:

Outfall	Latitude	Longitude	Discharge Type	Flow (mgd)
001	40°45'14.45"	-75°16'19.69"	Non-Contact Cooling Water	5.0
002	40°45'57"	-75°16'7"	Stormwater	N/A
003	40°45'5"	-75°16'25"	Stormwater	N/A
005	40°45'16"	-75°16'30"	Stormwater	N/A
006	40°45'50"	-75°16'40"	Stormwater	N/A

Approve	Deny	Signatures	Date
X		 William Hon / Environmental Engineer Specialist	February 12, 2026
X		 Edward Dudick, P.E. / Environmental Engineer Manager	February 17, 2026

Summary of Review

The plant design for Outfall 001 is as follows: the facility basin receives re-used quarry dewatering discharge and distributes it to other plant areas such as a raw mill, plant compressors, and mill equipment. All water used in the process either is evaporated to the atmosphere during plant operation or discharged to Outfall 001 and to Bushkill Creek at a rate of 3.0 to 5.0 mgd.

From 2023 DEP inspection report: "Prior to Outfall 001 there is a tiered raceway which receives quarry water used as cooling water in the plant. The raceway contains three settling tiers, two dams, an overflow, and four step-boxes. The two dams separate the three raceway tiers and aid in total suspended solids reduction. The four step-boxes aid in temp control and add dissolved oxygen to the discharged flow. Cooling water is pulled from the first tier of the raceway, run through the cooling process, and then returned to the first and second raceway tier from eight cooling water discharge pipes; cooling water from the finish mill is discharged via a single pipe just passed the second raceway dam. Booms are permanently installed in multiple locations along the raceway sections prior to discharge from Outfall 001."

Outfalls 002, 003, and 005 are stormwater only outfalls. These outfalls receive water from the rooftops of buildings and paved and unpaved lots of the facility. Outfall 005 receives stormwater runoff near a grandfathered in CKD (Cement Kiln Dust) pile and the applicant states this outfall has not discharged in fifteen (15) years.

This facility's primary SIC code is 3241 (Hydraulic Cement) and falls under Appendix N (Glass, Clay, Cement, Concrete and Gypsum Products) of the latest PAG03 General Permit. Appendix N includes semi-annual monitoring requirements for Total Nitrogen (mg/L), Total Phosphorus (mg/L), pH (S.U.), Total Suspended Solids (mg/L), Total Aluminum (mg/L), and Total Iron (mg/L). Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO₂+NO₃-N), where TKN and NO₂+NO₃-N are measured in the same sample. These requirements will be enforced on Outfalls 002, 003, and 005.

The ELG that governs this discharge is under 40 CFR Part 411 – Cement Manufacturing Point Source Category. The effluent limitation guidelines for the non-leaching category (Subpart A) have not changed since the previous permit cycle. Daily monitoring for Flow and a 3 (°C) temperature change at Outfall 001 are retained in this permit. Weekly monitoring and reporting for TSS, pH, and Oil & Grease are retained.

The previous permit implemented monthly monitor and report requirements for Thallium based on discussions held with the Applicant concerning Human Health Standards and TMS modeling. At the time, both parties agreed that more data is required to research and solve this problem. The previous five (5) years' worth of eDMR data shows that there is no correlation between an increase or decrease in Thallium levels from the intake to the discharged water of Outfall 001. Monthly monitoring of Thallium will be removed from the permit.

Subpart C of the same instruction dictates the TSS and pH sampling requirements for Outfalls with Material Storage Pile Runoffs. These are retained from the previous permit. The monthly effluent limitations for pH and TSS will not be enforced twice for the same outfalls. The monthly limitations are more stringent and will remain in the permit. The semi-annual monitoring of pH and TSS, as dictated by the PAG03 general permit, will not be implemented.

Outfall 002 and 003 also have an oil and grease limit due to the maintenance activity in the drainage areas of these outfalls. The Outfall 005 monitoring frequency will remain Daily when discharging since only an extreme storm event will activate a discharge.

For Outfall 001 a TSS variance was granted based on Background Data Proof of higher ambient TSS & Mining Permit No. 74735M2C's Outfall 007C which comingles with Outfall 001's cooling pond. TSS Effluent limits will be continued at 10 mg/l and 20 mg/L Daily Max. The general oil/grease requirement found in Chapter 95 under Section 95.2 – Quality Standards and Oil-bearing wastewaters will continue.

An amendment request package was received by DEP dated October 28, 2025 for the removal of Outfall 006. Outfall 006 was for a permitted CKD (Cement Kiln Dust) pile located to the South of the property. DEP issued a final closure certification on this CKD pile via email dated August 20, 2025. The area draining to the pond is entirely stabilized and contains no industrial activity. The facility intends to remove the outfall pipe and backfill the stormwater pond which will eliminate the discharge. This request for an amendment will be approved upon the issuance of this permit and all sampling requirements will be closed.

Due to the removal of outfall 006, there is no longer a need for any chemical additives at this facility. The facility had been adding a 50% sulfuric acid drip to the outfall for treatment. The chemical additives language in Part C of the permit will remain, along with the inclusion of the Chemical Additives Supplemental Form in the final permit package.

Summary of Review

There are no representative stream gages in the vicinity of Outfall 001. The default LFY of 0.1 cfs/mi² was chosen to model the discharge. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA as well as the "measure" tool. Drainage areas were delineated using USGS's StreamStats Interactive Map and elevations were obtained using the elevation profile feature of StreamStats. Q7-10 for the point of first use was determined using Streamstats.

TMS modeling was performed but did not recommend more stringent limits for Outfall 001. WQM modeling was not performed for this facility due to cooling water being non-contact. TRC modeling was not performed due to no use of Chlorine in the process. A RP (reasonable potential) analysis was performed and resulted in no new WQBELs introduced in the permit.

The fact sheet for the previous permit renewal mentioned a possible TMDL development for this section of Bushkill Creek. A TMDL search on pa.gov shows no mention of an existing TMDL for this stretch of the Bushkill. The yearly monitoring of Hercules Facilities 2014's TRI PoC will continue through this permit in case a TMDL is developed.

There is no DRBC docket for this facility.

The PPC was not included in the renewal request but was reviewed by DEP inspector during 2023 site visit.

Some of the existing Permit's Part C conditions that will be continued are:

1. The change in temperature for Outfall 001 shall be measured as the difference between the effluent temperature at Outfall 001 minus the stream temperature of Bushkill Creek at the pumped quarry water discharge point into the creek. If the Bushkill Creek Diversion Dam is being utilized, then the change in temperature shall be measured as the difference between the effluent temperature at Outfall 001 minus the stream temperature at the Bushkill Creek Diversion Dam.
2. The temperature monitoring location directly upstream of Outfall 001 shall remain approximately 50 yards upstream of Outfall 001. The temperature monitoring location directly downstream of Outfall 001 shall remain approximately 75 yards downstream of Outfall.
3. The discharge may not cause a change in surface water temperature of more than 2 degrees F during any one-hour period.

Other special conditions added to the permit:

- No Net Addition of Pollutants in NCCW
- DRBC May Have Other Requirements
- Chemical Additives
- Industrial Stormwater Requirements

The most recent inspection conducted at this facility occurred on February 17, 2023 and resulted in zero (0) violations. There are zero (0) open violations in the Clean Water Program for this facility.

Recommend Approval.

Modeling Inputs:

Hercules Cement Modeling

PT1 @ Outfall 001, Bushkill Creek, 4624, 1F (Jacoby – Bushkill Creeks), Impaired -Pathogens, HQ, CWF, MF

RMI: 1.25 (for modeling)

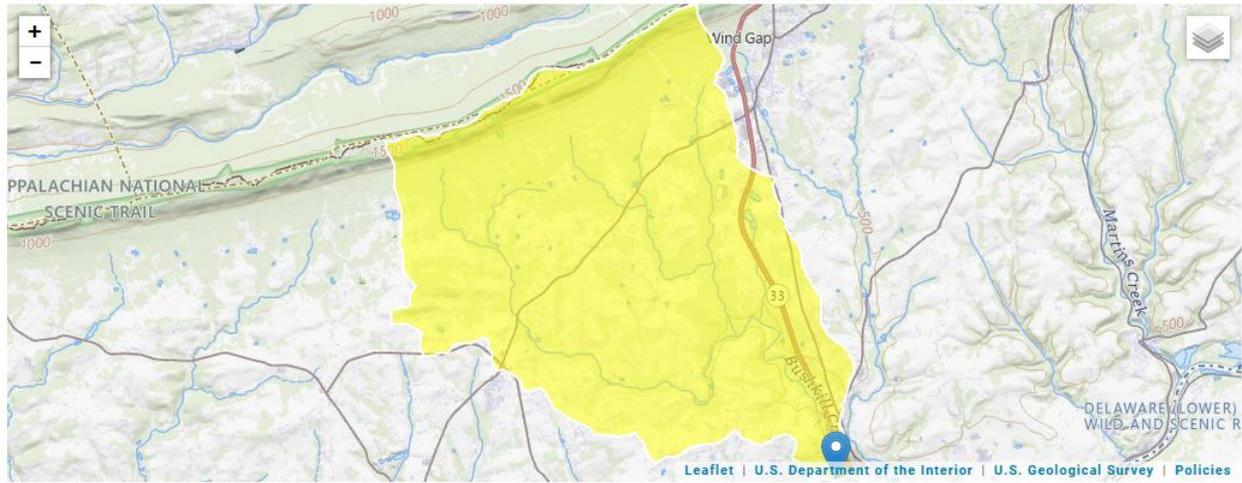
Summary of Review

Clicked Point (Latitude, Longitude):

40.75363, -75.27369

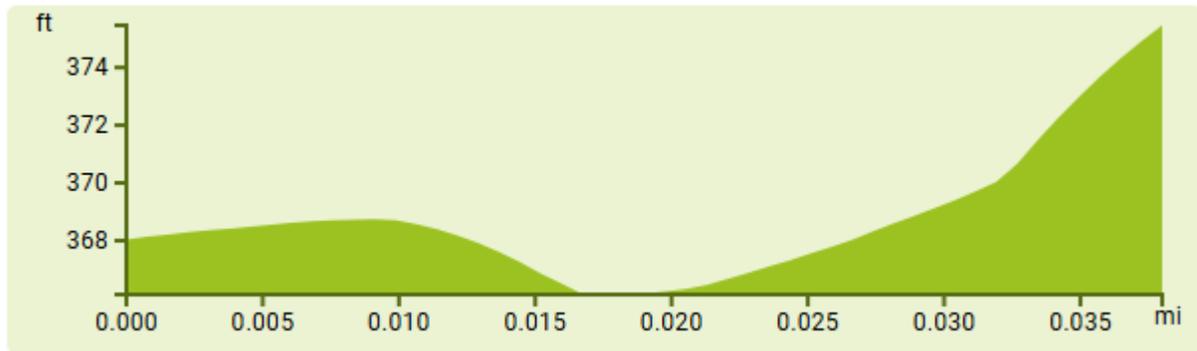
Time:

2026-02-12 14:04:12 -0500



DRNAREA	Area that drains to a point on a stream	30.2	square miles
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7 Day 10 Year Low Flow		2.2	ft ³ /s
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40.75366	-75.27381	366.13
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PT2 @ Conflux w/ Little Bushkill Creek Approx
 RMI: .01 (For modeling purposes)

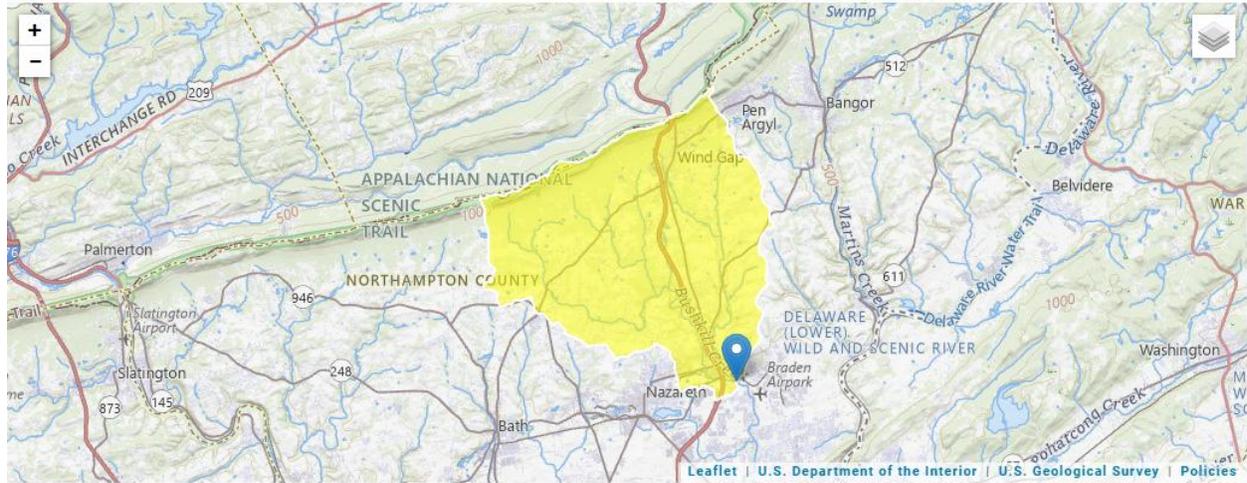
Summary of Review

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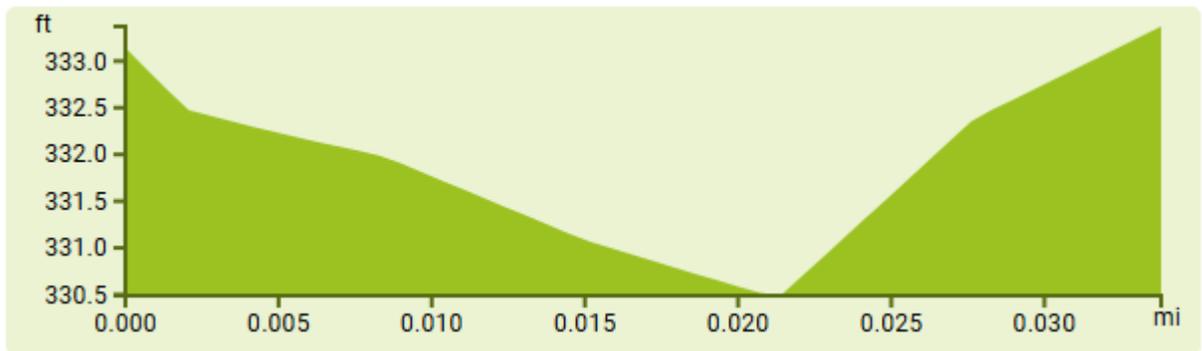
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Time:

2026-02-12 14:12:46 -0500



DRNAREA	Area that drains to a point on a stream	49.2
7 Day 10 Year Low Flow		3.9 ft ³ /s



40.74773 -75.25679 330.49

Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits			Units	Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX				

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*

Summary of Review

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.

