Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0064041**
Facility Type	**Industrial**	APS ID	**737283**
Major / Minor	**Minor**	Authorization ID	**1479200**

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

Applicant and Facility Information

Applicant Name	**Lehigh Heavy Forge Corporation**	Facility Name	**Lehigh Heavy Forge Corporation**
Applicant Address	275 Emery Street	Facility Address	275 Emery Street
	Bethlehem, PA 18015-1984		Bethlehem, PA 18015-1984
Applicant Contact	James Romeo	Facility Contact	James Romeo
Applicant Phone	(610) 332-8103	Facility Phone	(610) 332-8103
Client ID	117180	Site ID	484312
SIC Code	3462	Municipality	Bethlehem City
SIC Description	Manufacturing - Iron and Steel Forgings	County	Northampton
Date Application Received	April 3, 2024	EPA Waived?	Yes
Date Application Accepted	April 3, 2024	If No, Reason	

Purpose of Application: Renewal of NPDES permit for IW discharges

Summary of Review

The applicant is requesting renewal of their NPDES permit to discharge approximately 0.275 MGD of non-contact cooling water, contact cooling water, and stormwater from multiple outfalls into the Lehigh River, (WWF-MF) a warm-water and migratory fish receiving stream in state water plan basin 2-C (Lower Lehigh River). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use.

This segment of Lehigh River is impaired for combined sewer overflows (cause-TSS) and organic enrichment.

Lehigh Heavy Forge (LHF) is considered a Minor IW Facility without ELG. The permittee states the ELG does not apply to any of the outfalls because the forging operations at this facility have no water use and no associated discharge. Please note: if this facility discharged wastewater, they would fall under the ELG 420.132 Subpart M, Forging Operations.

This renewal application was submitted along with two amendments which will be incorporated in this renewal permit and are as follows:

Amendment# 1: (see flow-line diagram attached)

-Outfall IMP (202) will be considered a representative sampling location for each IMP in the facility with supporting arguments being presented from four years of sampling results.
- Analysis results for contact-water sampling conducted for IMP 202 + table results were provided

Amendment #2: (see attached updated stormwater drainage areas)

This Pertains only to stormwater:
- Outfall 001 was eliminated and won't be considered in this permit term.

Approve	Deny	Signatures	Date
X		Hakim (signed) Hakim Yesli / Environmental Engineering Specialist	February 2, 2026
X		Edward Dudick, P.E. / Environmental Engineer Manager	February 13, 2026

Summary of Review

-A request was put for outfall 003 to be incorporated in this renewal permit as stormwater roof drain from Forge Building.
-A second request was put for Outfall 002 to be incorporated in the permit.

I attended a site visit on January 13, 2026, along with Chris Harding, Department inspector, and Brad Jacoby, a site contact Engineering person at LHF. At the end of the site visit we concluded the following:

1- Outfall 001 elimination was confirmed after site construction and Earth disturbance on the drainage area (001).

2-Outfall 002 cannot be incorporated as stormwater because it is combined Outfall and it is not physically possible to create an IMP for stormwater since different roof-drains from that portion of Forge building are directed straight via underground pipping to Manhole where it commingles with contact-wastewater.

3- Outfall 003 can be incorporated in this renewal permit as stormwater Outfall only which was omitted in previous permit

Summary of review:

For the purpose of consistency and clarity I will keep the same Outfall clusters as was presented in last permit review

The outfalls and Internal monitoring points are grouped into 04 different groups:

1-Specialty Roll Shop – 4 waste streams that combine into **Outfall 008**

IMP 108 – Building Roof Drains and Stormwater Catch Basins
IMP 208 – Non-contact cooling water from the reservoir for quench water and three heat exchangers
IMP 308 – Contact cooling water from furnace seal and two quench units
IMP 408 – Contact cooling water from reservoir for furnace seal and quench unit
Outfall 008 – Pipe that receives discharges from all IMPs above and connects to the Lehigh Valley Industrial Park (LVIP) sewer line. LVIP's sewer line discharges to the Lehigh River off the permittee's property. Sampling is not required at Outfall 008 because samples are already being collected at each individual IMP that feeds into this outfall.

2- Forge Building group 002, comprised of 4 wastes streams that combine into outfall 002

IMP 102 – Building roof drains. No sampling required.
IMP 202 – Contact cooling water from reservoir for oil quench heat exchanger, annealing spray quench, and large annealing quench
IMP 302 – Building roof drains. No sampling required.

IMP 402 – Contact cooling water from small annealing quench
Outfall 002 – Receives discharges from all IMPs above and discharges into the same open channel as Forge Building Group 004. Sampling is not required at this outfall because samples are already being collected at IMP 202 and 402, which feed into this outfall.
Outfall 003 – Building roof drains. Discharges to same open channel and it is sampled this time
.

3-Forge Building group 004: is comprised of 3 waste streams which combine into Outfall 004

IMP 204 – Non-contact cooling water from press hydraulic oil system cooling tower blowdown
IMP 304 – Discharge from stormwater catch basin adjacent to the building that receives waters from IMP 104 and IMP 204. No sampling required at IMP 304 due to the influence of IMP 104 and 204. Stormwater can be represented from a stormwater Outfalls 001 and 005.
Outfall 004 – Pipe that receives discharges from all IMPs above and discharges to an open channel in front of the Forge Building. Sampling is not required at this outfall because samples are already being collected at IMP 104 and 204, which feed into this outfall.
Outfall 005 – adjacent to outfall 004 collect only stormwater from small area of the Forge building roof and monitoring for this Permit review.

Summary of Review

4- **Machine Shop Building:**

Outfall 007 – receives all discharge from Outfall 006 and stormwater from areas south of the machine shop building. The stormwater from Outfall 007 discharges to a common stormwater sewer on the Sand's Casino property before combined discharge into the Lehigh River

Outfall 006: is not being sampled because the flow is being directed to catch basin and towards 007.

Summary of limits for contact cooling- water and Oil-water separator for all Outfalls / IMPs: (202, 402, 408 & 208)

Limits for Oil & Grease and dissolved Iron are Technology Limits based on (Chapter 95.2) and carried over from the previous permit. The sampling frequency will be reduced to (1/discharge) because the previous frequency of (2/ month) was not appropriate since a discharge from quenching operation happens only once a month; this way eDMR system will not generate the violation by default

TSS reporting was added in previous permit term and will continue in this renewal per recommendation of *Technical Guidance for the Development and Specification of Effluent Limitations (doc. No. 386-0400-001) updated June 28, 2023.*

Water quality-based Limits:

RMI values were obtained using the "PA Historic Streams" feature of eMapPA as well as the "measure" tool. Elevations were obtained using the Elevation Profile feature of USGS StreamStats interactive map and drainage areas were estimated using the Watershed Delineation feature USGS StreamStats interactive map.

Using USGS stream Gage # 1453000 data at Lehigh River in Bethlehem for recorded period ending (01/21/2026) the flow was modeled using DEP Thermal spreadsheet.

The model recommended temperature limitations of 110^0 (see attached results). Based on sampling results for temperature in the current application and previous application, the maximum temperature recorded an average 76^0 F. There is very low probability to exceed the threshold of 110^0F. Also, Lehigh River has high assimilative capacity and T^0 absorption. Therefore, no temperature limitations will be imposed for this permit.

TMS spreadsheet was used to model the stream at IMP 202 with an average discharge flow of 0.128 MGD. The model did not recommend any new Limits (see Model results attached)

Summary of Limits for NCCW outfall IMP204: (cooling Tower)

For this current permit, the IMP208 is not listed as NCCW but it is contact water as shown above.

pH Limits are technology-based limits per (Chapter 95.2) and are carried over from previous permit. sampling frequencies stay as (1/ discharge).

Summary of limits for stormwater outfalls (003,005,007 &108):

This facility industrial activity is categorized by an SIC code 3462 (fabrication of Iron and Steel Forging) and falls under Appendix U monitoring requirement of the New PAG03 General (2023) permit. Appendix U includes semiannual monitoring/ reporting for Total suspended Solids (TSS), Total Nitrogen, Total phosphorus, pH, Nitrate + Nitrite-N, Oil & Grease, Total Aluminum, Total Iron and Total Zinc.

Benchmarks exist for TSS, pH, Oil & Grease and Nitrate + Nitrite- N. Benchmark values are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two or more consecutive monitoring periods, the permittee shall take action in accordance with Part C. V. F. of the permit. A corrective action plan (CAP) must be submitted to DEP if the discharge concentration for the parameters exceeds the benchmark values for two or more consecutive monitoring periods.

Summary of Review

Comments:

Based on Information given from the site contact Engineering personnel at (LHF), IMP 408 (specialty Roll shop) has a potential probability to discharge at the same time as IMP 202 (Forge Building). Therefore, it is required from the permittee to send sampling results for both IMP 202 and IMP 408 in the next permit term so they will be modeled together by adding both Flow values.


watershed Information for LHF.


New Site drainage Area after Ammendn


Flow line diagram.pdf


TMS Model Inputs worksheet IMP202 (


TMS Model Inputs worksheet IMP202. (


TMS Model results for IMP (202).pdf


Thermal limits results.pdf

WMS query by client report returned this following violation

.EHIGH HEAVY FORGE CORP	Industrial Waste	Active	WPC NPDES	PA0064041	4127541	8261917	PF	01/13/2026	92A.44	NPDES - Violation of effluent limits in Part A of permit	HARDING,CHRISTIAN	NERO

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.