pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST REGIONAL OFFICE
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET ADDENDUM

Application Type	**Renewal**	Application No.	**PA0012726**
Facility Type	**Industrial**	APS ID	**619966**
Major / Minor	**Minor**	Authorization ID	**1383281**

Applicant and Facility Information

Applicant Name	**Hydro Extrusion USA, LLC**	Facility Name	**Hydro Extrusion USA**
Applicant Address	53 Pottsville Street	Facility Address	53 Pottsville Street
	Cressona, PA 17929-1217		Cressona, PA 17929-1217
Applicant Contact	Nathan Krammes	Facility Contact	Nathan Krammes
Applicant Phone	(570) 385-8835	Facility Phone	(570) 385-8835
Client ID	141346	Site ID	246794
SIC Code	3354	Municipality	Cressona Borough
SIC Description	Manufacturing - Aluminum Extruded Products	County	Schuylkill
Date Published in PA Bulletin	-	EPA Waived?	No
Comment Period End Date	-	If No, Reason	DEP Discretion

Purpose of Application: Renewal of NPDES permit.

Internal Review and Recommendations

A draft permit was issued on December 20, 2023. Comments on the draft permit were received from the U.S. EPA and the permittee. The comments and DEP responses are below. Another draft permit will be issued. Note: Public notification of 1st draft permit issuance was not published in the PA Bulletin.

EPA Comment 1:

The factsheet indicates that internal monitoring point (IMP) 010 consists of treated industrial wastewater combined with stormwater and non-contact cooling water which goes to outfall 002 (the point of discharge) and discharges into the West Branch Schuylkill River. Prior modelling yielded WQBELs for Aluminum of 15.2 mg/l (monthly average) and 23.7 mg/l (daily maximum) which have been assigned again on this draft permit at outfall 010. In turn, only a monitoring requirement for Aluminum has been assigned to outfall 002.

There was no discussion on the factsheet about whether a reasonable potential analysis was done at the discharge point nor a rationale basing the decision to only require monitoring for Aluminum at outfall 002. Please include a discussion on the factsheet regarding whether there is reasonable potential at outfall 002 for Aluminum and any other pollutants of concern.

Response:

After draft permit issuance, information was requested from the permittee regarding the types and amounts of flow discharging through Outfall 002. The permit application and previous renewals indicated Outfall 002 discharges flows from IMP 010, stormwater, and noncontact cooling water. In an email dated March 12, 2024, the permittee stated Outfall 002 no longer discharges non-contact cooling water and only discharges flows from IMP 010 and stormwater.

Approve	Return	Deny	Signatures	Date
X			Brian Burden, E.I.T. / Project Manager	April 3, 2024
X			Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Acting Engineer Manager	4-8-24

Internal Review and Recommendations

Sample results were provided for Outfall 002 with the permit renewal application. The results were modeled using the same design flow as IMP 010 (no extra dilution) and no monitoring requirements or limitations were recommended (see attached results below) for all parameters that didn't have non-detect results. The maximum sample results for IMP 010 and Outfall 002 are summarized below:

Pollutant	IMP 010	Outfall 002
Total Aluminum (mg/L)	5.74	0.51
Total Chromium (mg/L)	< 0.005	0.0012
Total Zinc (mg/L)	0.5	0.03
Total Dissolved Solids (mg/L)	1060	101

DEP has not found reasonable potential for exceeding water quality standards at Outfall 002 based on the results provided.

EPA Comment 2:

The factsheet indicates that the receiving stream is affected by two TMDLs for Acid Mine Drainage: 1. The West Branch Schuylkill River Watershed TMDL, and 2. The Upper Schuylkill River Watershed TMDL. Please include a discussion of the facility's point of discharge in relation the areas of concern addressed by each TMDL and clarify the reason why *two* AMD TMDLs are applicable to this facility's single point of discharge.

Response:

The West Branch Schuylkill River Watershed TMDL was prepared in March 2005 for AMD affected segments. A revised TMDL was prepared in January 2017 (see below comment). At the last segment addressed in the TMDL (WB6), the WLAs for Aluminum, Iron, and Manganese are 637.23 lbs/day, 1,592.63 lbs/day, and 1,029.3 lbs/day, respectively. The sample point for WB6 is at the confluence of the West Branch Schuylkill River with the Schuylkill River, which is approximately 0.4 stream miles downstream of Outfall 002.

The Upper Schuylkill Watershed TMDL was prepared in March 2007 for AMD affected segments. The TMDL includes WLAs for the West Branch Schuylkill River for Aluminum, Iron, and Manganese at the same loading rates for WB6 in the West Branch Schuylkill River Watershed TMDL. The Upper Schuylkill Watershed TMDL also includes WLAs for other segments in addition to the West Branch Schuylkill River segment.

Since the area associated with the West Branch Schuylkill River Watershed TMDL is a subset of the area associated with the Upper Schuylkill Watershed TMDL, this discharge falls under both TMDLs.

EPA Comment 3:

The factsheet indicates that there were no WLAs applicable to this facility on neither the Upper Schuylkill River Watershed nor the West Branch Schuylkill River Watershed TMDL. However, our administrative record indicates that there was an EPA approved revision (see attached) to the West Branch Schuylkill River AMD TMDL in 2017 which added an Aluminum WLA for Hydro Extrusions USA, LLC, which was formally called Sapa Extrusions, LLC (PA0012726). Please include a discussion on the factsheet regarding this TMDL revision and the permit's consistency with the available WLA. Please also re-evaluate the need for an Aluminum effluent limit at outfalls 010 and/or 002 considering this WLA.

Internal Review and Recommendations

Response:

The revised TMDL assigned the following Aluminum WLA for the permittee (formerly Sapa Extrusions, Inc.):

Table 2: Additional Individual WLAs

NPDES Permit Number	Facility Name	Individual Wasteload Allocations		
		Aluminum (lbs/day)	Iron (lbs/day)	Manganese(lbs/day)
PA0012726	Sapa Extrusions, Inc.	12.7	*	*
PA0062821	SCMA Indian Run WTP	6.2	3.1	1.6

* An individual WLA was not assigned for these metals. The allocation for the pollutant of concern is included in the aggregate WLA, or bulk reserve, for the impaired segment upstream of monitoring point WB6.

The draft permit included the 12.7 lbs/day average monthly mass limitation for Total Aluminum at IMP 010. A monthly average concentration limit of 15.2 mg/L was included in the draft permit [12.7 lbs/day ÷ (8.34 x 0.1 MGD) = 15.2 mg/L]. Since stormwater flows to Outfall 002 are not measured, the mass-based WLA cannot be applied at Outfall 002.

A Part C special condition is included in the permit discussing the revised TMDL and aluminum WLA.

Permittee Comment:

We no longer use Spectrus NX104, Spectrus NX1102 or Depositrol SF5109. The water treatment chemicals currently in use were communicated in March and April of 2021 (see attachments) and with the permit application. In Addition, a majority of the non-oxidizing chemicals are no longer in use now that our system has stabilized with the new vendor and the use of Sodium hypochlorite.

The only non-oxidizing biocide we use is the Nalco 7320 – SDS attached. This material is only used in one cooling tower.

Response:

Monitoring requirements for Spectrus NX104, Spectrus NX1102 and Depositrol SF5109 are removed from the permit. Those additives, along with the other modeled additives described in the 1st draft permit fact sheet, were identified in the permit application. The permittee provided an updated list of the 5 chemical additives currently in use in an email dated December 21, 2023:

ControlBrom CB70: TMS modeling did not recommend monitoring at the current usage rate of 20 lbs/day.

3D Trasar 3DT494: TMS modeling did not recommend monitoring at the current usage rate of 15 lbs/day.

3D Trasar 3DT231: TMS modeling indicates an average monthly mass limitation of 356 lbs/day which is above the current usage rate of 256 lbs/day.

Nalco 7320: TMS modeling indicates an average monthly mass limitation of 1.72 lbs/day which is below the current usage rate of 10 lbs/day. The active ingredient in this additive is 2,2-dibromo-3-nitrilopropionamide (aka DBNPA). DBNPA is a biocide that's easily hydrolyzed in acidic or alkaline conditions. Depending on the conditions, DBNPA quickly degrades to form other chemicals, including ammonia and bromide. The permittee is required to monitor/report ammonia and bromide concentrations on a quarterly basis. eDMR results don't show elevated levels of those pollutants in the discharge. Quarterly monitoring/reporting is continued in this renewal. If the discharge begins to contain elevated levels of those pollutants, it may warrant future water quality-based limitations, Whole Effluent Toxicity monitoring/limits, or other requirements.

Sodium Hypochlorite: TMS modeling indicates an average monthly mass limitation of 0.065 lbs/day which is below the current usage rate of 160 lbs/day. Quarterly monitoring and reporting requirements are added to the permit for Total Residual Chlorine to help determine if excess sodium hypochlorite is used to treat the wastewater.

Internal Review and Recommendations


WestBranchSchuylkillRiver_TMDL_Revisi


West Branch Schuylkill River_2017


TMS PA0012726 Chemical Additives.p


TMS PA0012726 Outfall 002.pdf