

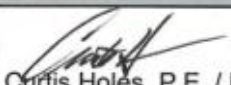
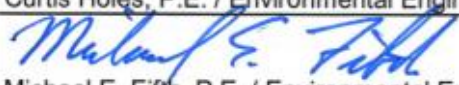
Application Type Amendment, Major
 Facility Type Industrial
 Major / Minor Minor

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

Application No. PA0004219-A1
 APS ID 1011764
 Authorization ID 1306214

Applicant and Facility Information			
Applicant Name	<u>Langeloth Metallurgical Co. LLC</u>	Facility Name	<u>Langeloth Metallurgical Plant</u>
Applicant Address	<u>PO Box 608 Main Street</u> <u>Langeloth, PA 15054</u>	Facility Address	<u>10 Langeloth Plant Drive Main Street</u> <u>Langeloth, PA 15054</u>
Applicant Contact	<u>Matthew Lucas</u>	Facility Contact	<u>Matthew Lucas</u>
Applicant Phone	<u>724.947.2201</u>	Facility Phone	<u>724.947.2201</u>
Client ID	<u>79366</u>	Site ID	<u>500111</u>
SIC Code	<u>1061,2819,3313</u>	Municipality	<u>Smith Township</u>
SIC Description	<u>Manufacturing - Electrometallurgical Products, Manufacturing - Industrial Inorganic Chemicals, Nec, Mining - Ferroalloy Ores, Except Vanadium</u>	County	<u>Washington</u>
Date Application Received	<u>February 19, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>February 26, 2020</u>	If No, Reason	<u></u>
Purpose of Application	<u>Modification of final compliance date to achieve the new Total Arsenic WQBEL for Outfall 301 and reduction of monitoring frequency for stormwater outfalls.</u>		

Summary of Review
<p>On February 19, 2020, the Department received a Major Modification Application to NPDES Permit PA0004219 from Langeloth Metallurgical Company, LLC (LMC) for the Langeloth Metallurgical Plant located in Smith Township, Washington County. LMC seeks to amend the compliance schedule for Internal Monitoring Point (IMP) 301 to achieve the new Water Quality-Based Effluent Limit (WQBEL) for Total Arsenic along with reducing the sampling frequency of the stormwater outfalls (002, 003, 004 and 006). The manufacturing operations at this facility are classified under the following Standard Industrial Classification (SIC) codes:</p> <ul style="list-style-type: none"> • 1061 – Ferroalloy ores, except vanadium • 2819 – Industrial Organic Chemicals (listed as the primary SIC code) • 3313 – Electrometallurgical products <p>LMC is subject to the Federal Effluent Limitation Guidelines found at 40 CFR 421 – Nonferrous Metals Manufacturing Point Source Category, Subpart I – Metallurgical Acid Plants Subcategory. The provisions of this subpart are applicable to discharges resulting from or associated with the manufacturing of by-product sulfuric acid at primary molybdenum facilities. With the exception of slag, raw material products and wastes are generally stored in buildings, undercover, or in closed containers and are not exposed to stormwater. Slag is stored outdoors in piles located along the northeast corner of the production facility.</p>

Approve	Deny	Signatures	Date
✓		 Curtis Holes, P.E. / Environmental Engineering Specialist	3/16/2020
✓		 Michael E. Fifth, P.E. / Environmental Engineer Manager	3/16/2020

Summary of Review

IMP 301 Compliance Schedule Amendment

LMC's NPDES Permit was issued on September 19, 2017, with an effective date of October 1, 2017. The permit contains new WQBELs at IMP 301 for Total Arsenic, Total Cobalt, and Total Thallium. LMC was given a three (3) year compliance schedule to conduct a Toxics Reduction Evaluation (TRE) prior to the new WQBELs becoming effective on October 1, 2020. Through the TRE evaluation, LMC believes that the Final WQBELs for Total Cobalt and Total Thallium are achievable.

Working through the TRE evaluations, LMC has identified and evaluated alternative technologies and/or modifications to the treatment process that could potentially achieve compliance with the final WQBEL for Total Arsenic. Only one (1) technology (iron coprecipitation) currently appears to offer the potential to meet the Total Arsenic Final WQBEL. LMC has performed screening level iron addition bench tests that have shown reduction levels around 80%. This 80% reduction approaches the average arsenic concentration limitation of 0.163 mg/L. Pilot and/or full plant testing can not be completed and properly evaluated prior to the current compliance schedule deadline of October 1, 2020. LMC has worked to achieve the final WQBEL's in a timely and good faith manner. The company has met with the Department on a routine basis and consistently provided updates on its progress.

The existing NPDES permit allows for a compliance schedule extension under 25 Pa Code 95.4. Pursuant to 25 Pa Code 95.4, the facility is pursuing an extension request of the final compliance date to achieve the new Total Arsenic WQBEL at IMP 301. The Department has directed the facility to submit a Major Modification Application to allow for the 95.4 extension. Therefore, this amendment is approved to further evaluate treatment technology(s) to achieve the final Total Arsenic WQBEL of Outfall 301. LMC requests a final compliance date to achieve Outfall 301's new Arsenic WQBEL of September 1, 2022.

Stormwater Outfall Monitoring Frequency Reeducation

LMC's NPDES Permit was issued on September 19, 2017, with an effective date of October 1, 2017. Part A of the permit contains a condition allowing the facility to petition to reduce the monitoring frequency of the stormwater outfalls (002, 003, 004 and 006). Below is the condition.

- (3) *Following one year of monitoring for Outfalls 002, 003, 004 and 006, the permittee may submit a summary of analytical results in support of a request to decrease monitoring frequency. Where data indicate concentrations of parameters in the permittee's discharges that are less than the threshold concentrations listed below for four consecutive monitoring periods at any outfall, DEP may, following receipt and review of the permittee's submission, reduce sampling frequency at the outfall(s) to annually (1/year).*

<u>Parameter</u>	<u>Threshold Concentration</u>
pH	Between 6 – 9 S.U.
Total Suspended Solids	100 mg/L
All Other Parameters	10 times the most stringent water quality standard in Chapter 93

The permittee may implement the authorized reduction in monitoring frequency upon receipt of DEP's written notification.

The reduced sampling frequency will be to a semi-annual frequency not annually. The semi-annual frequency a-lines with the sampling procedures of the NPDES General Permit monitoring requirements, which regulates facilities with stormwater only discharges.

Review of the stormwater outfalls monitoring data was completed and a summary of the findings is presented below in Table 1. Outfalls 002 and 004 results are below the threshold concentration for all the required parameters. Outfalls 002 and 004 are approved to reduce the monitoring frequency to semi-annually. Outfall 003 results have elevated TSS concentrations, so TSS monitoring frequency will remain quarterly. The remaining parameters of Outfall 003 are approved to reduce the monitoring frequency to semi-annually. Outfall 006 has two (2) parameters (cadmium and copper) results have elevated concentrations, which will remain at quarterly monitoring. The remaining parameters of Outfall 006 are approved to reduce the monitoring frequency to semi-annually.

Summary of Review

Table 1 - Stormwater Outfall Monitoring Data Review Summary

Parameter	Threshold Concentration (mg/L)	Outfall Determination (Quarterly or Semi-Annually)			
		002	003	004	006
pH (S.U.)	6 -9	Semi	Semi	Semi	Semi
TSS	100	Semi	Qtly.	Semi	Semi
Aluminum	7.5	Semi	Semi	Semi	Semi
Arsenic	0.1	Semi	Semi	Semi	Semi
Cadmium	0.0027	Semi	Semi	Semi	Qtly.
Copper	0.093	Semi	Semi	Semi	Qtly.
Fluoride	20	Semi	Semi	Semi	Semi
Iron	15	Semi	Semi	Semi	Semi
Lead	0.032	Semi	Semi	Semi	Semi
Manganese	10	Semi	Semi	Semi	Semi
Molybdenum		3.6	5.9	9.7	10.2
Zinc	12	Semi	Semi	Semi	Semi
Cobalt	0.19	N/A	N/A	Semi	N/A
Nickel	0.52	N/A	N/A	Semi	N/A
Selenium	0.05	N/A	N/A	Semi	N/A

The permittee has no open violations.

Recommended to revise the effective date of the Total Arsenic WQBEL at IMP 301 to September 1, 2022.

Recommended to revise the stormwater outfalls monitoring frequency as illustrated in Table 1 above.

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.