

# Emission Summary

Permit Number: 979077

65-0049-14

Source Status: New ☒ Modification ☐ Expansion ☐ Relocation ☐ Permit Status: New ☒ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ Previous Permit Number: Construction Operating 570857

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
Source 14 - Smelter										
										1200-03
PM		0.92	0.92		4.04	4.04		5/25/2021		07-.01(5)
SO <sub>2</sub>		21.88	21.88		95.83	95.83		5/25/2021		14-.01(3)
CO					14.59	14.59		5/25/2021		07-.07(2)
VOC					0.05	0.05		5/25/2021		07-.07(2)
NO <sub>x</sub>					1.11	1.11		5/25/2021		07-.07(2)
HCl		11.24	11.24		49.22	49.22		5/25/2021		09-.03(8)
Total HAPs		11.24	11.24		49.22	49.22		5/25/2021		09-.03(8)

\* - Source of data

PERMITTING PROGRAM: SPA DATE: 1/4/2024

# Emission Summary

Permit Number: 979077

65-0049-15

Source Status: New ☒ Modification ☐ Expansion ☐ Relocation ☐ Permit Status: New ☒ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ Previous Permit Number: Construction \_\_\_\_\_ Operating 570857

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
Source 15 – Calciner, Ball mills, Blender, and pouring										
										1200-03
PM		4.87	4.87		21.33	21.33		5/25/2021		07-.01(5)
SO <sub>2</sub>		0.002	0.002		0.01	0.01		5/25/2021		14-.03(5)
CO		0.31	0.31		1.37	1.37		5/25/2021		07-.07(2)
VOC		4.18	4.18		18.31	18.31		5/25/2021		07-.07(2)
NO <sub>x</sub>		0.37	0.37		1.64	1.64		5/25/2021		07-.07(2)
Pb		0.01	0.01		0.04	0.04		5/25/2021		
Total HAPs		0.13	0.13		0.55	0.55		5/25/2021		09-.03(8)

\* - Source of data

PERMITTING PROGRAM: SPA DATE: 1/4/2024

## Emission Summary

Permit Number: 979077

65-0049-16

Source Status: New ☒ Modification ☐ Expansion ☐ Relocation ☐ Permit Status: New ☒ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ Previous Permit Number: Construction \_\_\_\_\_ Operating 570857

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
Source 16 – Hammer Mill, Silos, and Day Bins										
										1200-03
PM		0.78	0.78		4.04	4.04		5/25/2021		07-.01(5)
Total HAPs					0.01	0.01		5/25/2021		09-.03(8)

\* - Source of data

PERMITTING PROGRAM: SPA DATE: 1/4/2024

# Emission Summary

Permit Number: 979077

65-0049-17

Source Status: New ☒ Modification ☐ Expansion ☐ Relocation ☐ Permit Status: New ☒ Renewal ☐

PSD ☐ NSPS ☐ NESHAPs ☐ Previous Permit Number: Construction Operating 570857

	Pounds/Hour			Tons/Year				Date of Data	*	Applicable Standard
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change			
Source 17 – Silos, and Day Bins										
										1200-03
PM		2.39	2.39		10.45	10.45		5/25/2021		07-.01(5)
Pb					0.02	0.02		5/25/2021		
Total HAPs					0.27	0.27		5/25/2021		09-.03(8)

\* - Source of data

PERMITTING PROGRAM: SPA DATE: 1/4/2024

# CONSTRUCTION PERMIT SUMMARY REPORT

Company Name: Heraeus Precious Metals North America, LLC File Number: 65-0049 EPS Initials: SPA

Permit Number(s): 979077 Source Point Number(s): 14-17

Application Received (date): 5/25/2021 Application Complete (date): 5/25/2021

Air Quality Analysis Performed? Yes ☐ No ☒

Briefly describe the project: (new source, modifications) (what the process is) (type controls proposed) (emissions expected, qualitative) (replacing what sources) (background information)

Heraeus Precious Metals North America, LLC, operating under Title V Permit 570857, plans to install a new process that includes multiple sources: a smelter, calciner (with ball mills and blender), a hammer mill, and additional bins and silos. The smelter will be controlled by a lime-injected baghouse, the calciner and hammer mill will each be controlled by a baghouse. These sources will be subject to a Case by Case MACT to help control HAPs, language was borrowed from multiple MACT; HCl emissions are expected to be over 49 tons per year from the smelter. There is an expected emission of volatile organic compounds (VOC) from the calciner, so no further VOC are expected from the smelter. Amendment #1 was issued to extend the expiration date and a typo was fixed in the Condition S2-5G Log #4 to correct the HAPs basis. The compliance method of Condition S2-4G was also revised to clarify the Natural Gas PM emissions tracking.

The smelter afterburner and calciner will have a combined 6.0 MMBtu/hr maximum heat input, utilizing Natural Gas as the only fuel source.

Performance testing shall be performed to determine SO<sub>2</sub> and HCl emission factors, testing will be performed according the Case by Case MACT requirements of permit 979077 using EPA Methods 26A or 320. The permittee asked to remove the monthly PM recordkeeping requirements for sources 14 and 15, based on baghouse operation, the request was granted for Source 14 due to the potential to emit being below the insignificant threshold of 5 tons per year. The recordkeeping requirement for source 15 (Condition S2-4G) was kept because the PTE was above 20 tons per year. Source 14's PM limit compliance method is based on the stricter continuous monitoring requirements from the Case by Case MACT and will not require a daily log for pressure drop.

## Rules Analysis

Title V ☒ Cond. Major ☐ Minor ☐ Source category listed in 1200-03-09-.01(4)(b)1.(i)? Yes ☐ No ☒

Reason for PSD:	New source above ____ TPY	<input type="checkbox"/>	Sig. increase in ____ emissions	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NSPS:	40 CFR Part 60, Subpart ____	<input type="checkbox"/>	State Rule 1200-03-16-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 61, Subpart ____	<input type="checkbox"/>	State Rule 1200-03-11-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Applicable NESHAP:	40 CFR Part 63, Subpart ____	<input type="checkbox"/>	State Rule 1200-03-31-. ____	<input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

## Other Applicable State Rules

PM Emissions:	1200-03-	<u>07</u>	-.	<u>01(5)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	NO <sub>x</sub> Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
SO <sub>2</sub> Emissions:	1200-03-	<u>14</u>	-.	<u>03(5)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	HCl Emissions:	1200-03-	<u>09</u>	-.	<u>03(8)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
CO Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	____ Emissions:	1200-03-	____	-.	____	<input type="checkbox"/>	N/A <input type="checkbox"/>
VOC Emissions:	1200-03-	<u>07</u>	-.	<u>07(2)</u>	<input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	____ Emissions:	1200-03-	____	-.	____	<input type="checkbox"/>	N/A <input type="checkbox"/>

Visible Emissions from	<u>Source 14</u>	not to exceed	<u>10</u>	% opacity per Method	<u>9</u>	1200-03-	<u>05</u>	-.	<u>03(6)</u>
Visible Emissions from	<u>Source 15</u>	not to exceed	<u>10</u>	% opacity per Method	<u>9</u>	1200-03-	<u>05</u>	-.	<u>03(6)</u>
Visible Emissions from	<u>Source 16</u>	not to exceed	<u>10</u>	% opacity per Method	<u>9</u>	1200-03-	<u>05</u>	-.	<u>03(6)</u>

Comments: \_\_\_\_\_