

## **TITLE V PERMIT STATEMENT**

<b>Company Name:</b>	<b>Johnson Matthey Inc.</b>
<b>Facility Name:</b>	<b>Johnson Matthey Inc.</b>
<b>City:</b>	<b>Sevierville</b>
<b>County:</b>	<b>Sevier</b>

<b>Date Application Received:</b>	<b>September 25, 2019</b>
<b>Date Application Deemed Complete:</b>	<b>September 25, 2019</b>

<b>Emission Source Reference No.:</b>	<b>78-0028</b>
<b>Permit No.:</b>	<b>577530</b>

### **INTRODUCTION**

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-03-09-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to Johnson Matthey, Inc. and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

#### **Acronyms**

PSD - Prevention of Significant Deterioration  
NESHAP - National Emission Standards for Hazardous Air Pollutants  
NSPS - New Source Performance Standards  
MACT - Maximum Achievable Control Technology  
NSR - New Source Review

## I. Identification Information

### A. Source Description

Emission Source Number	Description
78-0028-01	24.5 MMBtu/hr Natural Gas Fired Boiler
78-0028-15	Two (2) Nickel-Aluminum Digesters (#4 and #6)
78-0028-25	One (1) Nickel-Aluminum Digester (#5)
78-0028-28	Metals Melting and Alloying Operation
78-0028-29	Crushing and Milling Operation
78-0028-30	Nickel-Aluminum Digester #7 with Passive Scrubber Control
78-0028-31	Nickel-Aluminum Digester #8 with Passive Scrubber Control

### B. Facility Classification

1. Attainment or Non-Attainment Area Location: Area is designated as an attainment area for all criteria pollutants.
2. Company is located in a Class II area.

### C. Regulatory Status

1. PSD/NSR: This facility is not a major source under PSD.
2. Title V Major Source Status by Pollutant:

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status? (Major Source or Non-Major Source)*
PM	Yes	Non-Major Source
PM <sub>10</sub>	Yes	Non-Major Source
SO <sub>2</sub>	Yes	Non-Major Source
VOC	Yes	Non-Major Source
NO <sub>x</sub>	Yes	Non-Major Source
CO	Yes	Non-Major Source
Individual HAP	Yes	Non-Major Source
Total HAPs	Yes	Non-Major Source
GHG (CO <sub>2</sub> e)**	Yes	Non-Major Source
* This facility is an area source for all pollutants. A Title V permit is required pursuant to §63.11494(e) (any area source that installed a federally-enforceable control device on an affected CMPU is required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 if the control device on the affected CMPU is necessary to maintain the source's emissions at area source levels).		
** Greenhouse gases (GHG)		

3. The facility has been classified as a minor source with respect to the Title V program and as an area source with respect to the NESHAP regulations.
4. MACT Standards for Sources contained in this Title V Application: Sources contained in application are subject to the following MACT standards: 40 CFR 63 Subpart VVVVVV – the National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources. 40 CFR 63 subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
5. Program Applicability: Are the following programs applicable to the facility?  
PSD (no)  
NESHAP (yes)  
NSPS (yes) (40 CFR Part 60, Subpart Dc and 40 CFR Part 60, Subpart IIII)

## **II. Compliance Information**

### **A. Compliance Status**

Is this portion of the facility currently in compliance with all applicable requirements? yes

Are there any applicable requirements that will become effective during the permit term? no

## **III. Other Requirements**

**A. Emissions Trading:** Sources covered by this permit are not involved in an emissions trading program.

**B. Acid Rain Requirements:** This facility is not subject to any requirements in Title IV of the Clean Air Act.

**C. Prevention of Accidental Releases:** This source is not subject to 40 CFR Part 68.

## **IV. Public Participation Procedures**

Notification of this draft permit was mailed to the following environmental agencies:

1. EPA
2. North Carolina Department of Environment and Natural Resources
3. Knox County Dept. of Air Quality Management
4. Eastern Band of Cherokee

## **TITLE V PERMIT STATEMENT: PUBLIC COMMENTS**

<b>Company Name:</b>	<b>Johnson Matthey Inc.</b>
<b>Facility Name:</b>	<b>Johnson Matthey Inc.</b>
<b>City:</b>	<b>Sevierville</b>
<b>County:</b>	<b>Sevier</b>

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<b>Emission Source Reference No.:</b>	<b>78-0028</b>
<b>Permit No.:</b>	<b>577530</b>

<b>Public Notice Date</b>	<b>January 19, 2021</b>
<b>Public Hearing Date</b>	<b>None requested</b>

The public notice for this permit was published in the *Mountain Press* on January 19, 2021. There were no comments received during the public comment period and no comments from U. S. EPA.

### Changes Made in Title V Renewal Permit 577530 (Issued March 1, 2021)

Condition	Change														
A20	No changes to existing requirements. The application dated September 25, 2019 states that Johnson Matthey does not maintain any of the regulated substances in amounts greater than the threshold quantities. Therefore, the facility is not subject to the requirements of the Risk Management Program.														
E1, Attachment 5	Updated fee emissions and annual accounting period dates. Updated to use standard language and add fee selection form as Attachment 5.														
Section E	Updated source descriptions to match the current application.														
E2-1(d)	Per §63.10(a)(5), updated the due date for MACT reports from 30 days after the end of the reporting period to 60 days after the end of the reporting period.														
E2-1(e), E3-11 (old permit)	Moved NSPS Dc reporting requirements from E3-11 to E2-1(e). Per §60.19(d), updated the due date for NSPS reports from 30 days after the end of the reporting period to 60 days after the end of the reporting period.														
Section E3	<p>Permit conditions were renumbered as follows:</p> <table border="1"> <thead> <tr> <th>Old Permit Condition (568189)</th><th>New Permit Condition (577530)</th></tr> </thead> <tbody> <tr> <td>E3-1 through E3-8</td><td>E3-1 through E3-8</td></tr> <tr> <td>E3-9</td><td>E3-12</td></tr> <tr> <td>E3-10 through E3-12</td><td>E3-9 through E3-11</td></tr> </tbody> </table>	Old Permit Condition (568189)	New Permit Condition (577530)	E3-1 through E3-8	E3-1 through E3-8	E3-9	E3-12	E3-10 through E3-12	E3-9 through E3-11						
Old Permit Condition (568189)	New Permit Condition (577530)														
E3-1 through E3-8	E3-1 through E3-8														
E3-9	E3-12														
E3-10 through E3-12	E3-9 through E3-11														
E3-3	Updated limit (#2 fuel oil usage) from 12-month rolling total to calendar year basis. The limit was updated to match the existing agreement.														
E3-4	Added averaging period (daily average basis) for PM allowable emissions.														
E3-5	Updated SO <sub>2</sub> allowable emissions from 12.43 lb/hr <u>or</u> 1.40 tons/year to 12.43 lb/hr <u>and</u> 1.40 tons/year. Updated compliance method to reference the design heat input in Condition E3-1.														
E3-6	Updated compliance method to cross-reference Condition E3-5.														
E3-7	Added averaging period (daily average basis) for NO <sub>x</sub> allowable emissions.														
E3-9	Added the NSPS definition of distillate oil.														
E3-11	Updated condition numbering. Updated compliance method to reference E2-1(e).														
E4-2	Updated compliance method to reference GACT VVVVVV requirements.														
E4-4 (old permit)	Deleted, replaced with the GACT requirements of E6-5 (operate and maintain the source in accordance with good air pollution control practice at all times).														
E4-5 (old permit)	Moved to the compliance method for Condition E4-2.														
E5-2	Updated compliance method to reference GACT VVVVVV requirements.														
E5-4 (old permit)	Deleted, replaced with the GACT requirements of E6-5 (operate and maintain the source in accordance with good air pollution control practice at all times). Moved baghouse pressure drop specifications to E5-2.														
Section E6	<p>Permit conditions were renumbered as follows:</p> <table border="1"> <thead> <tr> <th>Old Permit Condition (568189)</th><th>New Permit Condition (577530)</th></tr> </thead> <tbody> <tr> <td>E6-1 through E6-6</td><td>E6-1 through E6-6</td></tr> <tr> <td>E6-7</td><td>Deleted in renewal</td></tr> <tr> <td>E6-8</td><td>Combined into E6-6</td></tr> <tr> <td>E6-9</td><td>E6-7</td></tr> <tr> <td>E6-10</td><td>Deleted in renewal</td></tr> <tr> <td>E6-11 through E6-13</td><td>E6-8 through E6-10</td></tr> </tbody> </table>	Old Permit Condition (568189)	New Permit Condition (577530)	E6-1 through E6-6	E6-1 through E6-6	E6-7	Deleted in renewal	E6-8	Combined into E6-6	E6-9	E6-7	E6-10	Deleted in renewal	E6-11 through E6-13	E6-8 through E6-10
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**Changes Made in Title V Renewal Permit 577530 (Issued March 1, 2021)**

Condition	Change																		
E6-3	Updated GACT leak inspection requirements by adding a criterion for repair of leaks (no bubbles are observed at potential leak sites during a leak check using soap solution).																		
E6-7 (old permit)	Moved to E6-6.																		
E7-2, E8-2	Updated the compliance method to add the stack test result for digester #6.																		
E7-3	Changed compliance method from inspection/maintenance to annual certification.																		
E8-3	Added compliance method.																		
Section E9 (old permit)	<div>Section E9 was deleted in the renewal. The emergency engine was designated as an insignificant emissions unit subject to the general requirements in Conditions D12 and D14. Potential emissions at 500 hr/year are shown below.</div> <table><tr><th>Pollutant</th><th>Emissions (lb/hr)</th><th>Emissions (tons/year)</th></tr><tr><td>PM</td><td>0.11</td><td>0.03</td></tr><tr><td>SO<sub>2</sub></td><td>0.67</td><td>0.17</td></tr><tr><td>CO</td><td>1.87</td><td>0.47</td></tr><tr><td>VOC</td><td>2.13</td><td>0.53</td></tr><tr><td>NO<sub>x</sub></td><td>2.13</td><td>0.53</td></tr></table>	Pollutant	Emissions (lb/hr)	Emissions (tons/year)	PM	0.11	0.03	SO <sub>2</sub>	0.67	0.17	CO	1.87	0.47	VOC	2.13	0.53	NO <sub>x</sub>	2.13	0.53
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Section E10 (old permit)	Renumbered to Section E9.																		
E9-2	Updated compliance method to annual certification for consistency with Conditions E7-3 and E8-3.																		
Attachment 2	Added summary of MACT VVVVVV monitoring requirements and MACT General Provisions Applicability.																		
Attachment 4	Added copies of the agreement letters referenced in the permit.																		

<b>Changes Made to Title V Operating Permit 577530 Since Renewal Issuance</b>			
<b>Modification</b>	<b>Issue Date</b>	<b>Condition/Section</b>	<b>Change</b>
Administrative Amendment #1 (AA1)	September 14, 2021	<b>General Information</b>	Administrative Amendment #1 corrects facility ID on the cover page.
		<b>Notifications</b>	A copy of the final permit will be sent to U. S. EPA upon issuance.
Minor Modification #1 (MM1)	TBD	<b>General Permit Conditions</b>	Revised Conditions A-D based on updated standard Title V permit language drafted by the Division. Some of the specific revisions are listed below:
			Revised Conditions A8, A11, and A18
			Revised B7 to “Reserved” and revised B8(a)
		<b>Section E</b>	Revised Condition E1 with regards to dates in the Annual Accounting Period (AAP), definitions, and the address for fees and emissions reporting.
			Updated Condition E2-1 to remove the reporting period with respect to permit numbers that no longer apply and updated the Division address.
			Updated Condition E2-10 with the new Technical Contact based on notification from the facility dated January 7, 2025.
		<b>E5-2 and E5-3</b>	Changed the minimum pressure drop in the compliance method from 0.1 inches of water column to 1.3 inches of water column. The facility proposed this value based on monitoring and recording of the pressure drop across the baghouse/HEPA dust control system during initial operation following startup of the replacement baghouse.
		<b>Attachment 2</b>	Changed the acceptable range minimum pressure drop from 0.1 inches of water column to 1.3 inches of water column for the baghouse/HEPA dust control system in the Site-Specific Monitoring Plan.

Draft MM #1 permit sent to EPA: TBD  
EPA Comments: TBD