

ALLEGHENY COUNTY HEALTH DEPARTMENT AIR QUALITY PROGRAM

April 18, 2024

SUBJECT: **Metalico Pittsburgh, Inc.**
3100 Grand Avenue
Neville Township, PA 15225
Allegheny County

Synthetic Minor Source Operating Permit No. 0692-OP24

TO: JoAnn Truchan, P.E.
Program Manager, Engineering

FROM: Michael Dorman
Air Quality Engineer

FACILITY DESCRIPTION:

Metalico Pittsburgh, Inc. is a scrap metal recycling facility located at 3100 Grand Avenue on Neville Island in Allegheny County. The facility specializes in the recycling of ferrous and non-ferrous metals. The facility receives, sorts, stores, and processes (shearing, baling, shredding, etc.) various scrap metals. The process consists of a shredder, a ferrous material separator, and a non-ferrous material separator. Non-metallic material (fluff) from automobiles and appliances is separated from the ferrous and non-ferrous scrap and sent to a landfill for disposal.

The facility is a synthetic minor source of particulate matter (PM), particulate matter < 10 microns in diameter (PM₁₀), particulate matter < 2.5 microns in diameter (PM_{2.5}) and volatile organic Compounds (VOCs). It is a minor source for sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO) and hazardous air pollutants (HAPs) as defined in section 2101.20 of Article XXI. The facility limits PM and VOC emissions by limiting operation of the shredder.

PERMIT APPLICATION COMPONENTS:

1. Synthetic Minor Operating Permit Application No. 0692-OP23, received March 17, 2023.
2. Administrative Compliance Order on Consent (In the Matter of Metalico Pittsburgh, Inc. – EPA Docket No. CAA-03-2023-0016DA), signed January 19, 2023.
3. Installation Permit Application No. 0692-I002, received January 26, 2017.
4. Supplemental information to Installation Permit Application No. 0692-I002, received August 7, 2019.

EMISSION SOURCES:

Emissions Sources

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P-001	Scrap Metal Shredder	Cyclone	120 tph	Scrap metal	S001
B-001	Clean Burn Coil Tube Boiler Model: CB-500-CTB	None	0.5 MMBtu/Hr	Waste Oil	S002
T-001	1,000-gallon On-road Diesel Tank	None	1,000 gal	Diesel Fuel	
T-002	3,000-gallon Off-road Diesel Tank	None	3,000 gal	Diesel Fuel	
T-003	3,000-gallon Off-road Diesel Tank	None	3,000 gal	Diesel Fuel	
T-004	3,000-gallon Used Oil Tank	None	3,000 gal	Used Oil	
T-005	10,000-gallon Off-road Diesel Tank	None	10,000 gal	Diesel Fuel	
T-006	10,000-gallon On-road Diesel Tank	None	10,000 gal	Diesel Fuel	
PW-001	Parts Washer	None	15 – 20 gal	ZEP DYNA 143 solvent	
PW-002	Parts Washer	None	15 – 20 gal	ZEP DYNA 143 solvent	
F-001	Loading Barges and Trucks	Wetting Material		Scrap	
TC-001	Torch Cutting	None		Scrap	

METHOD OF DEMONSTRATING COMPLIANCE:

Methods of demonstrating compliance with the emission standards of this permit include the following:

- Recording daily hours of operation.
- Recording tons per hour of shred feed.
- Recording time when shredder motor exceeds 200 amps.
- Conducting routine analysis of the waste derived fuel.

Compliance with the short-term (lb/hr) limits must be maintained at all times, including startup and shutdown unless explicitly stated otherwise in the permit. Any emissions due to startup and/or shutdown are included in facility's total annual emissions. See Operating Permit No. 0692-OP24 for the specific conditions for determining compliance with the applicable requirements.

EMISSION CALCULATIONS

See attached spreadsheet.

REGULATORY APPLICABILITY:

1. Article XXI Requirements for Issuance:

See Permit Application No. 0692-OP24, Section 5. The requirements of Article XXI, Parts B and C for the issuance of operating permits have been met for this facility. Article XXI, Part D, Part E & Part H will have the necessary sections addressed individually.

2. Testing Requirements:

Initial testing shall be performed to confirm that the boiler has a direct emission reduction of 99%. The Department reserves the right to require additional testing if necessary, in the future to assure compliance with the terms and conditions of this Synthetic Minor Operating Permit.

3. Applicable New Source Performance Standards (NSPS):

This facility is not subject to any NSPS standards.

4. Applicable NESHAP and MACT Standards:

The boiler is subject to 40 CFR Part 63, Subpart JJJJJJ – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* because it meets the definition of a liquid fueled industrial boiler located in an area source of HAPs.

5. Emission Inventory:

This facility is required to provide annual Emission Inventory reports per §2108.01.e of Article XXI because this facility has the potential to emit more than 25 tpy of PM and VOCs.

6. Risk Management Plan; CAA Section 112(r):

The facility is not required to have a risk management plan at this time because none of the regulated chemicals exceed the thresholds in the regulation.

7. Greenhouse Gas Reporting (40 CFR Part 98):

The facility is a minor source of greenhouse gas emissions. There are presently no applicable requirements for greenhouse gases. The facility does not exceed 25,000 metric tons of CO₂e in any 12-month period, so the facility is not required to submit reports in accordance with 40 CFR Part 98.

8. Compliance Assurance Monitoring (40 CFR Part 64):

The Compliance Assurance Monitoring (CAM) rule found in 40 CFR 64 is not applicable because this facility is not a major source.

EMISSIONS SUMMARY:

Emissions Summary for Metalico Pittsburgh, Inc.

Pollutant	Total (tpy[*])
Particulate Matter	43.64
Particulate Matter <10 µm (PM ₁₀)	20.65
Particulate Matter <2.5 µm (PM _{2.5})	15.77
Sulfur Oxides (SO _x)	0.98
Nitrogen Oxides (NO _x)	0.34
Carbon Monoxide (CO)	0.09
Volatile Organic Compounds (VOC)	46.94
Hazardous Air Pollutants (HAP)	1.33
Greenhouse Gases (CO ₂ e)	395.61

* A year is defined as any consecutive 12-month period.

RECOMMENDATION:

All applicable Federal, State, and County regulations have been addressed in the permit application. The Operating Permit for the Metalico Pittsburgh, Inc. should be approved with the emission limitations, terms and conditions in Permit No. 0692-OP24.