LOUISVILLE METRO
AIR POLLUTION CONTROL DISTRICT
701 W. Ormsby Ave., Louisville, Kentucky 40203

Federally Enforceable District Origin Operating Permit

Statement of Basis

Company: Multi-Metals

Plant Location: 715 E. Gray St., Louisville, KY 40202

Date Application Received: 12/10/2010, updated 5/9/2014

Date of Draft Permit: April 15, 2016

District Engineer: Rick Williams **Permit No:** O-0754-15-F

Plant ID: 0754 **SIC Code:** 3425 **NAICS**: 332213

Introduction:

This permit will be issued pursuant to District Regulation 2.17- *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO_2), carbon monoxide (CO), 1 hr and 8 hr ozone (O_3), and particulate matter less than 10 microns (PM_{10}); and is a non-attainment area for the 1997 standard for particulate matter less than 2.5 microns ($PM_{2.5}$), unclassifiable for the 2012 standard for particulate matter less than 2.5 micron ($PM_{2.5}$) and partial non-attainment area for sulfur dioxide (SO_2).

Application Type/Permit Activity:

[ ] Initial Issuance

[ ] Permit Revision
- [ ] Administrative
- [ ] Minor
- [ ] Significant

[**X**] Permit Renewal

Compliance Summary:

[X] Compliance certification signed
[ ] Source is out of compliance
[ ] Compliance schedule included
[X] Source is operating in compliance

I. Source Information

1. Product Description: Multi-Metals manufactures tungsten carbide and related products.

2. Process Description: Multi-Metals mixes raw material metals and blends them to produce a homogeneous powder. The powder is then pressed to produce a variety of products. Much of the originally-permitted equipment has been abandoned in place and is no longer used.

3. Site Determination: There are no other facilities that are contiguous or adjacent to this facility

4. Emission Unit Summary:

Emission Unit	Equipment Description
U1	Natural gas-fired boiler, rated at 1.3 MMBtu/hr. This boiler was originally installed in 1938 and burned coal. In 1972 it was converted to burn natural gas only.
U2	Powder process comprising 4 attritor mills for producing a powder of uniform grain size, 2 blenders for mixing the powders, a spray dryer to remove the naphtha added in the earlier processes, and 2 tanks for storing new and used naphtha.
U5	Three grit blast units with associated dust-control equipment.
U4	A variety of equipment that has been abandoned in place and is no longer functional.

5. Fugitive Sources: There are no fugitive emissions to be considered.

6. Permit Revisions:

Revision	Permit #	Issue Date	Public Notice Date	Type	Page #	Description	
Original	11-04-F	03/31/ 2006	12/04/ 2005	Initial	Entire Permit	Initial permit issuance: 11-04-F	03/31/2006
R1	O-0754-15-F	TBD	04/15/ 2016	Renew	Entire Permit	FEDOOP renewal application	12/10/2010
						STAR Exemption application	05/09/2014

7. Emission Summary:

Pollutant	Actual 2009 Emissions (tons)	Major Source Trigger (based on PTE)
CO	0.11	No
NO_x	0.13	No
SO_2	0.001	No
PM_{10}	6.30	No
VOC	10.5	**YES**
Total HAPs	0.27	No
Single HAP	0.26	No

8. Applicable Requirements:

[ ] PSD [ ] 40 CFR 60 [ ] SIP [ ] 40 CFR 63
[ ] NSR [ ] 40 CFR 61 [X] District-Origin [ ] Other

9. MACT Requirements: The source has no future MACT requirements.

10. Referenced Federal Regulations in Permit: There are no applicable federal regulations.

11. Construction Permit History: No construction permits have been issued since the issuance of FEDOOP permit 11-04-F.

II. Regulatory Analysis

1. Acid Rain Requirements: Multi-Metals is not subject to the Acid Rain Program.

2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. Multi-Metals does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

3. Prevention of Accidental Releases 112(r): Multi-Metals does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.

4. 40 CFR Part 64 Applicability Determination: Multi-Metals is not subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources*.

5. Basis of Regulation Applicability

a. **Plant-wide**

Multi-Metals is a potential major source for volatile organic compounds and hazardous air pollutants. Regulation 2.17 – F*ederally Enforceable District Origin Operating Permits* establishes requirements to limit the plant wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements. Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. The company has requested a VOC emission limit of less than 25 tons per year, total hazardous air pollutants (HAPs) emission limit of less than 12.5 tons per year and any single HAP emission limit of less than 5 tons per year to qualify for classification as a FEDOOP - STAR-Exempt source, as defined by Regulation 5.00, section 1.13.5. Multi-Metals is not major for Greenhouse Gases.

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to APCD upon request.

Regulation 2.17, section 7.2, requires that stationary sources for which a FEDOOP permit is issued must submit an Annual Compliance Certification by April 15 of the following calendar year. In addition, as required by Regulation 2.17, section 5.2, the source shall submit an Annual Compliance Report to show compliance with the permit by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement as described in Regulation 2.17, section 3.5.

b. Emission Unit Description

Emission Unit U1 – Boiler

Emission Point	Description	Applicable Regulation	Stack ID	Control ID
E1	1.3 MMBtu/hr boiler, natural gas only (installed as coal-fired in 1938, converted to natural gas after 1972)	7.06	S1	N/A

Federal regulation 40 CFR 63, subpart JJJJJJ is not applicable because this unit can burn only natural gas. [40 CFR 63.11195(e)].
Federal regulation 40 CFR 60, subpart Dc is not applicable because the maximum heat input is less than 10 MMBtu/hr. [40 CFR 60.40c(a)]

Emission Unit U2 – Powder Process

Emission Point	Description	Applicable Regulation	Stack ID	Control ID
E2	4 Attritor mills, Union Process, model 100SC (1975)	6.09, 6.24	C1	S2
E3	2 Blender processors, Patterson, model 124 (1969)	6.09, 6.24	C1	S2
E4	Spray dryer, Niro, model HC-160 (1977)	6.24	Fugitive	N/A
E5	Naphtha settling tank, 750 gallons (1977)	7.12	---	N/A
E6	Naphtha storage tank, 6000 gallons (1984)	7.12	---	N/A

Control ID	Description	Stack ID
C1	Baghouse, DCE Volkes model UMA40AD	S2

Raw materials are mixed with naphtha, used as a blending agent. PM emissions are controlled with the C1 baghouse; VOC emissions are uncontrolled. Naphtha from the dryer is condensed and stored in the settling tank to allow the solids to separate before reuse. New naphtha is kept in the storage tank.

Emission Unit U5 – Grit Blast

Emission Point	Description	Applicable Regulation	Stack ID	Control ID
E11	Grit blaster #31, Ruemelin AG60X36 with integral dust collector (1983)	7.08	Integral	N/A
E12	Grit blaster #32, IPS I244 with integral dust collector (2001)	7.08	Integral	N/A
E13	Grit blaster #30, Guyson R-900 (1989)	7.08	S2	C1

Control ID	Description	Stack ID
C1	Baghouse, DCE Volkes model UMA40AD	S2

Grit blasters are used to clean the surface of finished parts. Particulate matter is collected by the integral dust collector interlocked to grit blasting equipment or the external dust collection unit, as indicated.

Emission Unit U4 – Mothballed Equipment

Emission Point	Description	Applicable Regulation	Stack ID	Control ID
E8	Grinders	None	N/A	N/A
E9	Slicers	None	N/A	N/A
E10	Vertical lathe	None	N/A	N/A
E11	Drill press	None	N/A	N/A
E12	Bandsaws	None	N/A	N/A

This equipment is located at the facility, but is not operational. There are no applicable regulations for non-operating equipment. This equipment is listed only to facilitate permitting should the company decide to reactivate it.

d. Standards

i. Particulate Matter

(1) Emission Unit U1 (Boiler)
Regulation 7.06, section 4.1.1 specifies the maximum PM emission rate for boilers with a maximum heat input less than 10 MMBtu/hr.

(2) Emission Unit U2 (Powder Process)
Regulation 6.09 governs particulate emissions for equipment put in service before September 1, 1976. Emission points E2 and E3 both meet this definition. The equation in Table 1 of this regulation defines the maximum PM emission rate from any equipment controlled by this regulation.

(3) Emission Unit U5 (Grit Blasters)
Regulation 7.08 governs particulate emissions for equipment put in service after September 1, 1976. All emission points in this emission unit meet this definition. The equation in Table 1 of this regulation defines the maximum PM emission rate from any equipment controlled by this regulation.

ii. Opacity

(1) Emission Unit U2 (Powder Process)
Regulation 6.09 governs opacity limits from particulate emissions for equipment put in service before September 1, 1976. Emission points E2 and E3 both meet this definition.

(2) Emission Unit U5 (Grit Blasters)
Regulation 7.08 governs opacity limits from particulate emissions for equipment put in service after September 1, 1976. All emission points in this emission unit meet this definition.

iii. Volatile Organic Compounds

(1) Emission unit U2 (Powder Process)

(a) Regulation 6.24 sets forth emission standards for existing processes (operating before June 13, 1979) in which VOC-containing materials are used as part of the process. Naphtha is a class III solvent under the terms of this regulation and is limited by section 3.3.

(b) Standards for new (post-1972) storage tanks are set forth in Regulation 7.12. Naphtha has a vapor pressure less than 1.5 psia, the minimum pressure for which specific operational standards are set.

(c) Multi-Metals has previously operated under a plant-wide emission limit of 100 tons of VOC per year as a FEDOOP source. With this renewal the company has requested a 25-ton VOC limit, which, along with a 5-ton single-HAP and 12.5 ton total-HAP annual limit, will exempt them from STAR regulations, as defined in Regulation 5.00.

iv. Sulfur Dioxide

(1) Emission Unit U1 (Boiler)
Regulation 7.06, section 5.1.1 specifies the maximum SO_2 emission rate for boilers with a maximum heat input less than 145 MMBtu/hr.

v. Hazardous Air Pollutants

(1) Emission Unit U2 (Powder Process)
Multi-Metals has requested STAR Exempt status, as defined in Regulation 5.00, section 1.13.5. To achieve this status, they must accept a Plant-wide annual emission limit of 25

tons of VOC and an annual limit of 5 tons of any single HAP and 12.5 tons of all HAPs combined.

(2) Emission Unit U3 (Grit Blasters)
Multi-Metals has requested STAR Exempt status, as defined in Regulation 5.00, section 1.13.5. To achieve this status, they must accept a Plant-wide annual emission limit of 25 tons of VOC and an annual limit of 5 tons of any single HAP and 12.5 tons of all HAPs combined.

III. Other Requirements

1. Temporary Sources: The source did not request to operate any temporary facilities.

2. Short Term Activities: The source did not report any short term activities.

3. Emissions Trading: N/A

4. Operational Flexibility: The source did not request any operation flexibility.

5. Compliance History: Multi-Metals submitted their second semi-annual report for 2012, due March 1, 2013, late. The report was received April 12, 2013. There are no other violations on record.

6. Insignificant Activities: The source has identified the following insignificant activities:

Insignificant Activities		
Equipment	**Quantity**	**Regulation Basis**
Metal-extruding presses	2	Regulation 1.02, Appendix A, 3.1
Brazing, soldering, or welding equipment	1	Regulation 1.02, Appendix A, 3.4