



Louisville Metro Air Pollution Control District
 701 W. Ormsby Avenue
 Louisville, Kentucky 40203



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-0754-15-F

Plant ID: 0754

Effective Date: xx/xx/2015

Expiration Date: xx/xx/2020

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the processes and equipment described herein which are located at:

Multi-Metals
 715 E. Gray St.
 Louisville, Kentucky 40202

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve (12) months and no later than ninety (90) days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant: VOC
 Tons/year: <25

Application No.: 14390
 64765

Application Received: 12/10/2010
 05/09/2014

Permit Writer: Rick Williams

Date of Public Notice: 04/15/2016

{Manager1}
 Air Pollution Control Officer
 {date1}

TABLE OF CONTENTS

FEDOOP Permit Revision History 1

Abbreviations and Acronyms 2

Preamble 3

General Conditions 4

Emission Unit U1 - Boiler 8

 Applicable Regulations 8

 Permitted Equipment 8

 Specific Conditions 8

Emission Unit U2 - Powder Process 10

 Applicable Regulations 10

 Permitted Equipment 10

 Specific Conditions 11

Emission Unit U5 - Grit Blast 14

 Applicable Regulations 14

 Permitted Equipment 14

 Specific Conditions 14

Insignificant Activities 17

Mothballed Equipment 17

FEDOOP Permit Revision History						
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	TBD	Renewal	Entire Permit	FEDOOP renewal application 12/10/2010
						STAR Exemption application 05/09/2014

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors, published by U.S.EPA</i>
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
HCl	- Hydrogen chloride
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.
2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.
3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.
4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.
5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.
6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.
7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.
8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.
9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as

the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in Section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.

10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA; or any combination of greenhouse gasses whose combined global warming potential equals or exceeds 100,000 tons CO₂-equivalent, as defined in 40 CFR 98). Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.
11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
12. Unless specified elsewhere in this permit, the owner or operator shall submit annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include:
 - Company name,
 - Plant ID number,
 - Beginning and ending date of the reporting period.

The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company. The report must be postmarked no later than March 1 of the year following the calendar year covered in the annual report.

13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures

Regulation	Title
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.17	Federally Enforceable District Origin Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions

14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption of Federal New Source Performance Standards

15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.
16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.
17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

***Air Pollution Control District
Room 205
850 Barret Ave
Louisville, KY 40204-1745***

Emission Unit U1 - Boiler

Applicable Regulations		
Regulation	Title	Applicable Sections
7.01	General Provisions	1, 2, 3, 5
7.06	Standards of Performance for New Indirect Heat Exchangers	1-5

Permitted Equipment				
Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E1	1.344 MMBtu/hr boiler, natural gas only (Installed as coal-fired in 1938; converted to natural gas after 1972) (Insignificant)	7.06	N/A	S1

Specific Conditions**S1. Standards**

[Regulation 2.03, section 6.1]

a. Particulate Matter (PM/PM₁₀)

The owner or operator shall not allow PM emissions from the natural gas-fired boiler to exceed 0.56 pounds per hour at the maximum firing rate.¹

[Regulation 7.06, Section 4.1.1]

b. Sulfur Dioxide (SO₂)

The owner or operator shall not allow SO₂ emission from the natural gas-fired boiler to exceed 1.0 pounds per million-Btu of actual heat input.²

[Regulation 7.06, Section 5.1.1]

¹ Using AP-42 emission factors for combustion of natural gas, the PM emission limit for the natural gas-fired boiler cannot be exceeded uncontrolled.

² Using AP-42 emission factors for combustion of natural gas, the SO₂ emission limit for the natural gas-fired boiler cannot be exceeded uncontrolled.

S2. Monitoring and Record Keeping

[Regulation 2.03, section 5.1]

The owner or operator shall conduct regular monitoring as described below and keep logs demonstrating compliance with these monitoring requirements. All records shall be maintained for a period of five years from the date of creation.

a. Particulate Matter (PM/PM₁₀)

There are no monitoring or recordkeeping requirements for this pollutant.

b. Sulfur Dioxide (SO₂)

There are no monitoring or recordkeeping requirements for this pollutant.

S3. Reporting

[Regulation 2.03, section 5.1]

a. Particulate Matter (PM/PM₁₀)

There are no regular compliance reporting requirements for this pollutant.

b. Sulfur Dioxide (SO₂)

There are no regular compliance reporting requirements for this pollutant.

Emission Unit U2 - Powder Process

Applicable Regulations		
Regulation	Title	Applicable Sections
5.00	Definitions	1
6.09	Standards of Performance for Existing Process Operations	1-3, 5
6.24	Standards of Performance for Existing Sources Using Organic Materials	1-5
7.12	Standards of Performance for New Storage Vessels for Volatile Organic Compounds	1-5

Permitted Equipment				
Emission Point	Description	Applicable Regulation	Control ID	Stack 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	N/A	F
E5	Naphtha settling tank, 750 gallons (1977) (Insignificant)	7.12	N/A	---
E6	Naphtha storage tank, 6000 gallons (1984) (Insignificant)	7.12	N/A	---

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

Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. Particulate Matter (PM/PM10)

The owner or operator shall not allow or cause PM emissions from any of the E2 mills or E3 blenders to exceed 2.34 pounds per hour each, averaged monthly.³

[Regulation 6.09, section 3.2]

b. Opacity

The owner or operator shall not cause or allow any gases that contain PM equal to or in excess of 20% opacity to be discharged into the atmosphere.

[Regulation 6.09, section 3.3.1]

c. Volatile Organic Compounds (VOC)

i. The owner or operator shall not allow or cause plant-wide VOC emissions to exceed 25 tons in any 12-consecutive-month period.

[Regulation 5.00, section 1.13.5]

ii. All openings, except stub drains, of tanks E5 and E6 shall be equipped with covers, lids, or seals that shall remain closed at all times, except when in actual use.

[Regulation 7.12, section 4.2]

iii. The owner or operator shall not allow or cause VOC emissions to exceed 450 pounds per hour or 3000 pounds per day.⁴

[Regulation 6.24, section 3.3]

d. Hazardous Air Pollutants (HAP)

The owner or operator shall not allow or cause plant-wide HAP emissions to exceed 5 tons for any single HAP or 12.5 tons for all HAPs combined in any 12-consecutive-month period.

[Regulation 5.00, section 1.13.5]

³ Using accepted emission factors, APCD has determined that these emission limits cannot be exceeded uncontrolled.

⁴ Using accepted emission factors, APCD has determined that these emission limits cannot be exceeded uncontrolled.

S2. Monitoring and Recordkeeping

[Regulation 2.17, section 5.2]

The owner or operator shall conduct regular monitoring as described below and maintain logs demonstrating compliance with these monitoring requirements. These logs shall include, at a minimum, the date of the monitoring activity, the name of the person performing the monitoring activity, and the results of the monitoring activity. All records shall be retained for a period of five years from the date of creation.

a. Particulate Matter (PM/PM10)

The owner or operator shall maintain monthly records of the total carbide production and the total hours that each of the mills and blenders operated for each calendar month.

b. Opacity

- i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. Volatile Organic Compounds (VOC)

Every calendar month the owner or operator shall monitor and maintain records of the quantity of naphtha used for each calendar month and for each 12-consecutive-month period. This quantity is to be determined by adding the amount of new deliveries to the beginning monthly inventory and subtracting the ending monthly inventory. The resulting amount is equivalent to the monthly VOC emissions.

d. Hazardous Air Pollutants (HAP)

Using the average weight-percentage for each HAP contained in, or used in the production of, the carbide powder, the owner or operator shall monthly calculate

and maintain monthly records of individual and total HAP emissions for each month and for each 12-consecutive-month period.

S3. Reporting

[Regulation 2.17, section 5.3]

The owner or operator shall submit annual compliance reports as specified in General Condition 12, and include the information in this section. The compliance reports shall clearly identify any deviation from a permit requirement.

a. Particulate Matter (PM/PM₁₀)

The owner or operator shall report any times that the calculated PM emission rate exceeded the maximum rate.

b. Opacity

There are no regular reporting requirements for this characteristic.

c. Volatile Organic Compounds (VOC)

The owner or operator shall report monthly and 12-month rolling total VOC emissions for each month of the reporting period.

d. Hazardous Air Pollutants (HAP)

The owner or operator shall report monthly and 12-month rolling total HAP emissions for each HAP individually and all HAPs combined for each month of the reporting period.

Emission Unit U5 - Grit Blast

Applicable Regulations		
Regulation	Title	Applicable Sections
7.01	General Provisions	1, 2, 3, 5
7.08	Standards of Performance for New Process Operations	1-5

Permitted Equipment				
Emission Point	Description	Applicable Regulation	Control ID	Stack 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	C1	S2

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

Specific Conditions**S1. Standards**

[Regulation 2.17, section 5.1]

a. Particulate Matter (PM/PM₁₀)

The owner or operator shall not allow or cause PM emissions from any of the equipment of this emission unit to exceed 2.34 pounds per hour.⁵

[Regulation 7.08, section 3.1.2]

⁵ APCD has determined that the emission standard cannot be exceeded with the control devices operating.

b. Opacity

The owner or operator shall not cause or allow any gases that contain PM equal to or in excess of 20% opacity to be discharged into the atmosphere.

[Regulation 7.08, section 3.1.1]

c. Hazardous Air Pollutants (HAP)

The owner or operator shall not allow or cause plant-wide HAP emissions to exceed 5 tons for any single HAP or 12.5 tons for all HAPs combined in any 12-consecutive-month period.

[Regulation 5.00, section 1.13.5]

S2. Monitoring and Recordkeeping

[Regulation 2.17, section 5.2]

The owner or operator shall conduct regular monitoring as described below and maintain logs demonstrating compliance with these monitoring requirements. These logs shall include, at a minimum, the date of the monitoring activity, the name of the person performing the monitoring activity, and the results of the monitoring activity. All records shall be retained for a period of five years from the date of creation.

a. Particulate Matter (PM/PM₁₀)

If there is any time that the control device is bypassed or not in operation when the process is operating, then the owner or operator shall keep a record of the following for each bypass event:

- i. Date;
- ii. Start time and stop time;
- iii. Identification of the control device and process equipment;
- iv. PM emissions during the bypass in lb/hr;
- v. Summary of the cause or reason for each bypass event;
- vi. Corrective action taken to minimize the extent or duration of the bypass event; and
- vii. Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

b. Opacity

- i. The owner or operator shall conduct a monthly one-minute visible emissions survey, during normal operation, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall

perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.

- iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. Hazardous Air Pollutants (HAP)

Using the average weight-percentage for each HAP contained in, or used in the production of, the carbide powder, the owner or operator shall calculate and maintain monthly records of individual and total HAP emissions for each month and for each 12-consecutive-month period.

S3. Reporting

[Regulation 2.17, section 5.3]

The owner or operator shall submit annual compliance reports as specified in General Condition 12, and include the information in this section. The compliance reports shall clearly identify any deviation from a permit requirement.

a. Particulate Matter (PM/PM₁₀)

If there is any time that the control device is bypassed or not in operation when the process is operating, then the owner or operator shall keep a record of the following for each bypass event:

- i. Date;
- ii. Start time and stop time;
- iii. Identification of the control device and process equipment;
- iv. PM emissions during the bypass in lb/hr;
- v. Summary of the cause or reason for each bypass event;
- vi. Corrective action taken to minimize the extent or duration of the bypass event; and
- vii. Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

b. Opacity

There are no regular reporting requirements for this characteristic.

c. Hazardous Air Pollutants (HAP)

The owner or operator shall report monthly and 12-month rolling total HAP emissions for each HAP individually and all HAPs combined for each month of the reporting period.

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

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
3. The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
6. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) to be reported on the annual emission inventory.
7. The District has determined pursuant to Regulation 2.16 section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

Mothballed Equipment	
Equipment	Make/Model
Grinders	Reid / 618
Slicers	Dreshman / FL700
Vertical lathe	Gero / VTL16C
Drill press	Enco / 100
Band saws	Gero / MBX-12