

**SPECIAL METALS CORPORATION**

3200 Riverside Dr.  
Huntington, WV 25705-1771 U.S.A.  
(304) 526-5389100  
www.specialmetals.com  
**TOM BELL**  
Environmental Manager - HBE

West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston WV 25304

**RE: PERMIT DETERMINATION TITLE V – Huntington Alloys Corp Facility in Huntington, West Virginia  
(permit R30-01100007-2013)**

Dear Ms. Scroggie,

Huntington Alloys Corporation, which owns and operates a metal rolling mill facility in Huntington, West Virginia, operating under permit number Permit R30-01100007-13 is requesting a review of the permit determination application for the:

- Wheelabrator 34 (emission unit TP-10P)
  - A like for like replacement for the current Pangborne GN34

The Wheelabrator 34 is a replacement for the current shot blaster Panborne GN34.

**Process Description**

This project will be installed in the Thistle Processing building, which prepares scrap material by sizing, cleaning, and drying available metal alloy pieces for internal use and resale. The proposed new blaster, a wheelabrator 34, is identical to the Pangborn GN34. The wheelabrator will be used to clean metal alloy scrap before being melted and used in the manufacturing operations.

**Applicable Submittal**

Since the Title V permit already has tumble blaster limitations within Condition 13.1 for Thistle Processing, only conditions 1.1, 13.1.1, 13.1.2, 13.1.3, 13.1.4 will need to be reviewed in assurance that the machines are identical.

Please have the contents of the Determination request reviewed and, if in order, it is requested that someone from the DAQ provide a written indication that the facility can proceed with the desired changes in operation equipment. I can be contacted by phone or email at the following:  
[TBell@specialmetals.com](mailto:TBell@specialmetals.com) or (304)526-5259.

Tom Bell

Environmental Manager HBE  
Cc: file, Thistle Processing



WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR QUALITY  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
Phone: (304) 926-0475  
www.dep.wv.gov/daq

**PERMIT DETERMINATION FORM  
(PDF)**

FOR AGENCY USE ONLY: PLANT I.D. # \_\_\_\_\_  
PDF # \_\_\_\_\_ PERMIT WRITER \_\_\_\_\_

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):  
**Huntington Alloys**

2. NAME OF FACILITY (IF DIFFERENT FROM ABOVE):  
**Huntington Alloys**

3. NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE:  
**331491**

4A. MAILING ADDRESS:  
3200 Riverside Dr  
Huntington WV, 25705

4B. PHYSICAL ADDRESS:  
3200 Riverside Dr  
Huntington WV, 25705

5A. DIRECTIONS TO FACILITY (PLEASE PROVIDE MAP AS ATTACHMENT A):

5B. NEAREST ROAD:  
Riverside Dr

5C. NEAREST CITY OR TOWN:  
Huntington

5D. COUNTY:  
Cabell

5E. UTM NORTHING (KM):  
4252.30

5F. UTM EASTING (KM):  
379.2

5G. UTM ZONE:  
17

6A. INDIVIDUAL TO CONTACT IF MORE INFORMATION IS REQUIRED:  
Tom Bell

6B. TITLE:  
Environmental Manager

6C. TELEPHONE:  
(304)526-5259

6D. FAX:  
(304)526-5437

6E. E-MAIL:  
Tbell@specialmetals.com

7A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY ONLY):  
**011-00007**

7B. PLEASE LIST ALL CURRENT 45CSR13, 45CSR14, 45CSR19 AND/OR TITLE V (45CSR30) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR AN EXISTING FACILITY ONLY):  
R30-01100007-2013

7C. IS THIS PDF BEING SUBMITTED AS THE RESULT OF AN ENFORCEMENT ACTION? IF YES, PLEASE LIST:

8A. TYPE OF EMISSION SOURCE (CHECK ONE):  
 NEW SOURCE     ADMINISTRATIVE UPDATE  
 MODIFICATION     OTHER (PLEASE EXPLAIN IN 11B)

8B. IF ADMINISTRATIVE UPDATE, DOES DAQ HAVE THE APPLICANT'S CONSENT TO UPDATE THE EXISTING PERMIT WITH THE INFORMATION CONTAINED HEREIN?  
 YES     NO

9. IS DEMOLITION OR PHYSICAL RENOVATION AT AN EXISTING FACILITY INVOLVED?     YES     NO

10A. DATE OF ANTICIPATED INSTALLATION OR CHANGE:  
09/ 01 /2015

10B. DATE OF ANTICIPATED START-UP:  
09/ 01 /2015

11A. PLEASE PROVIDE A DETAILED PROCESS FLOW DIAGRAM SHOWING EACH PROPOSED OR MODIFIED PROCESS EMISSION POINT AS ATTACHMENT B.

11B. PLEASE PROVIDE A DETAILED PROCESS DESCRIPTION AS ATTACHMENT C.

12. PLEASE PROVIDE MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS PROCESSED, USED OR PRODUCED AS ATTACHMENT D. FOR CHEMICAL PROCESSES, PLEASE PROVIDE A MSDS FOR EACH COMPOUND EMITTED TO AIR.

**13A. REGULATED AIR POLLUTANT EMISSIONS:**

⇒ FOR A NEW FACILITY, PLEASE PROVIDE PLANT WIDE EMISSIONS BASED ON THE POTENTIAL TO EMIT (PTE) FOR THE FOLLOWING AIR POLLUTANTS INCLUDING ALL PROCESSES.

⇒ FOR AN EXISTING FACILITY, PLEASE PROVIDE THE PROPOSED CHANGE IN EMISSIONS BASED ON THE PTE OF ALL PROCESS CHANGES FOR THE FOLLOWING AIR POLLUTANTS.

PTE FOR A GIVEN POLLUTANT IS TYPICALLY BEFORE AIR POLLUTION CONTROL DEVICES AND IS COLLECTED BASED ON THE MAXIMUM DESIGN CAPACITY OF PROCESS EQUIPMENT.

POLLUTANT	HOURLY PTE (LB/HR)	YEARLY PTE (TON/YR) (HOURLY PTE MULTIPLIED BY 8760 HR/YR) DIVIDED BY 2000 LB/TON
PM	0.26 lb/hr	0.05 ton/yr
PM <sub>10</sub>		
VOCs		
CO		
NO <sub>x</sub>		
SO <sub>2</sub>		
Pb		
HAPs (AGGREGATE AMOUNT)	0.04 lb/hr	0.01 ton/yr
TAPs (INDIVIDUALLY)*		
OTHER (INDIVIDUALLY)*		

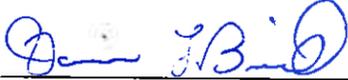
\* ATTACH ADDITIONAL PAGES AS NEEDED

**13B. PLEASE PROVIDE ALL SUPPORTING CALCULATIONS AS ATTACHMENT E.**

CALCULATE AN HOURLY AND YEARLY PTE OF EACH PROCESS EMISSION POINT (SHOWN IN YOUR DETAILED PROCESS FLOW DIAGRAM) FOR ALL AIR POLLUTANTS LISTED ABOVE INCLUDING INDIVIDUAL HAP'S (LISTED IN SECTION 112[b] OF THE 1990 CAAA), TAP'S (LISTED IN 45CSR27), AND OTHER AIR POLLUTANTS (E.G. POLLUTANTS LISTED IN TABLE 45-13A OF 45CSR13, MINERAL ACIDS PER 45CSR7, ETC.).

**14. CERTIFICATION OF DATA**

I, DARRIN BIRD (TYPE NAME) ATTEST THAT ALL THE REPRESENTATIONS CONTAINED IN THIS APPLICATION, OR APPENDED HERETO, ARE TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE BASED ON INFORMATION AND BELIEF AFTER REASONABLE INQUIRY, AND THAT I AM A RESPONSIBLE OFFICIAL\*\* (PRESIDENT, VICE PRESIDENT, SECRETARY OR TREASURER, GENERAL PARTNER OR SOLE PROPRIETOR) OF THE APPLICANT.

SIGNATURE OF RESPONSIBLE OFFICIAL: 

TITLE: Plant Director

DATE: 8 / 19 / 2015

\*\* THE DEFINITION OF THE PHRASE 'RESPONSIBLE OFFICIAL' CAN BE FOUND AT 45CSR13, SECTION 2.23.

**NOTE: PLEASE CHECK ENCLOSED ATTACHMENTS:**

ATTACHMENT A  ATTACHMENT B  ATTACHMENT C  ATTACHMENT D  ATTACHMENT E

RECORDS ON ALL CHANGES ARE REQUIRED TO BE KEPT AND MAINTAINED ON-SITE FOR TWO (2) YEARS.

THE PERMIT DETERMINATION FORM WITH THE INSTRUCTIONS CAN BE FOUND ON DAQ'S PERMITTING SECTION WEB SITE:

[www.dep.wv.gov/daq](http://www.dep.wv.gov/daq)

ATTACHMENT A



Directions from 57th St SE to 3200 Riverside Dr

○ 57th St SE

Charleston, WV 25304

Get on I-64 W/I-77 N from Chesterfield Ave and Maccorkle Ave SE

2.5 mi / 6 min

- ↑ 1. Head northwest on Chesterfield Ave toward Lower Donnally Rd
- ↗ 2. Take the 1st right onto 50th St SE
- ↖ 3. Turn left onto Maccorkle Ave SE
- ↘ 4. Turn right onto 36th St SE
- ↑ 5. Continue onto 36th St Southeast Bridge
- ↗ 6. Take the ramp onto I-64 W/I-77 N

Follow I-64 W to US-60 W/Midland Trail in Barboursville. Take exit 15 from I-64 W

46.9 mi / 41 min

- ↗ 7. Merge onto I-64 W/I-77 N
- ↙ 8. Keep left at the fork to continue on I-64 W, follow signs for Interstate 64 W/Huntington
- ↘ 9. Take exit 15 to merge onto US-60 W/Midland Trail

Drive to Riverside Dr in 3

1.9 mi / 4 min

- ↗ 10. Merge onto US-60 W/Midland Trail
  - ↘ 11. Turn right onto 5th St
  - ↖ 12. Take the 1st left onto Riverside Dr
- 📍 Destination will be on the right



Directions from 57th St SE to 3200 Riverside Dr

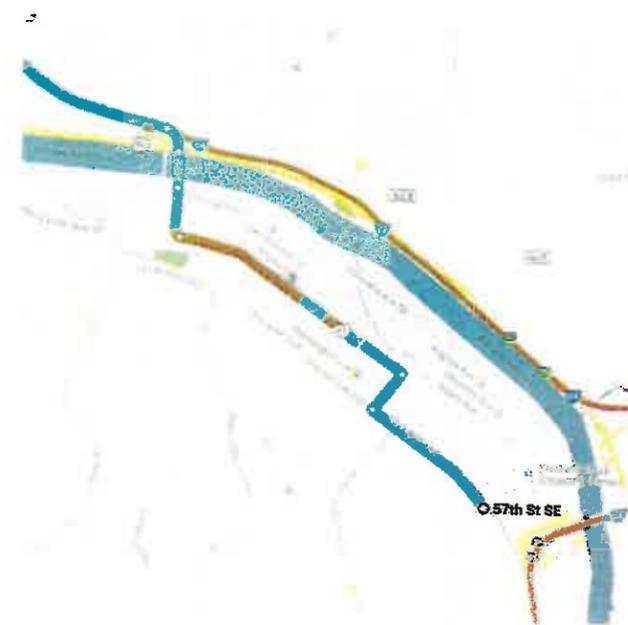


○ 57th St SE  
Charleston, WV 25304

Get on I-64 W/I-77 N from Chesterfield Ave and Maccorkle Ave SE

2.6 mi / 6 min

- ↑ 1. Head northwest on Chesterfield Ave toward Lower Donnally Rd
- ↘ 2. Take the 1st right onto 50th St SE
- ↙ 3. Turn left onto Maccorkle Ave SE
- ↘ 4. Turn right onto 36th St SE
- ↑ 5. Continue onto 36th St Southeast Bridge
- ↑ 6. Take the ramp onto I-64 W/I-77 N



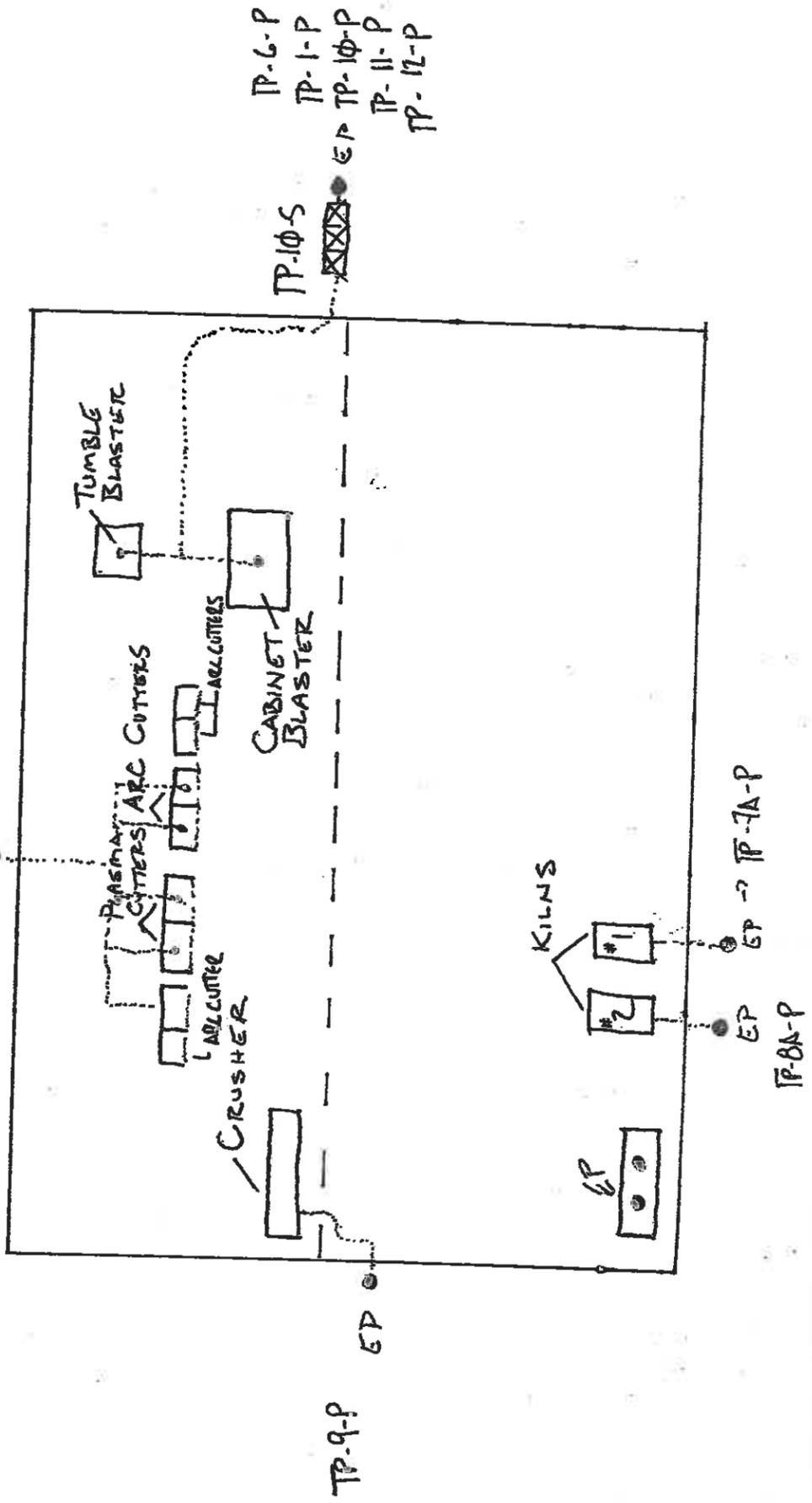
Follow I-64 W to US-60 W/Midland Trail in Barboursville. Take exit 15 from I-64 W



# CALEDONIAN ALLOYS

## TITLE V EMISSIONS

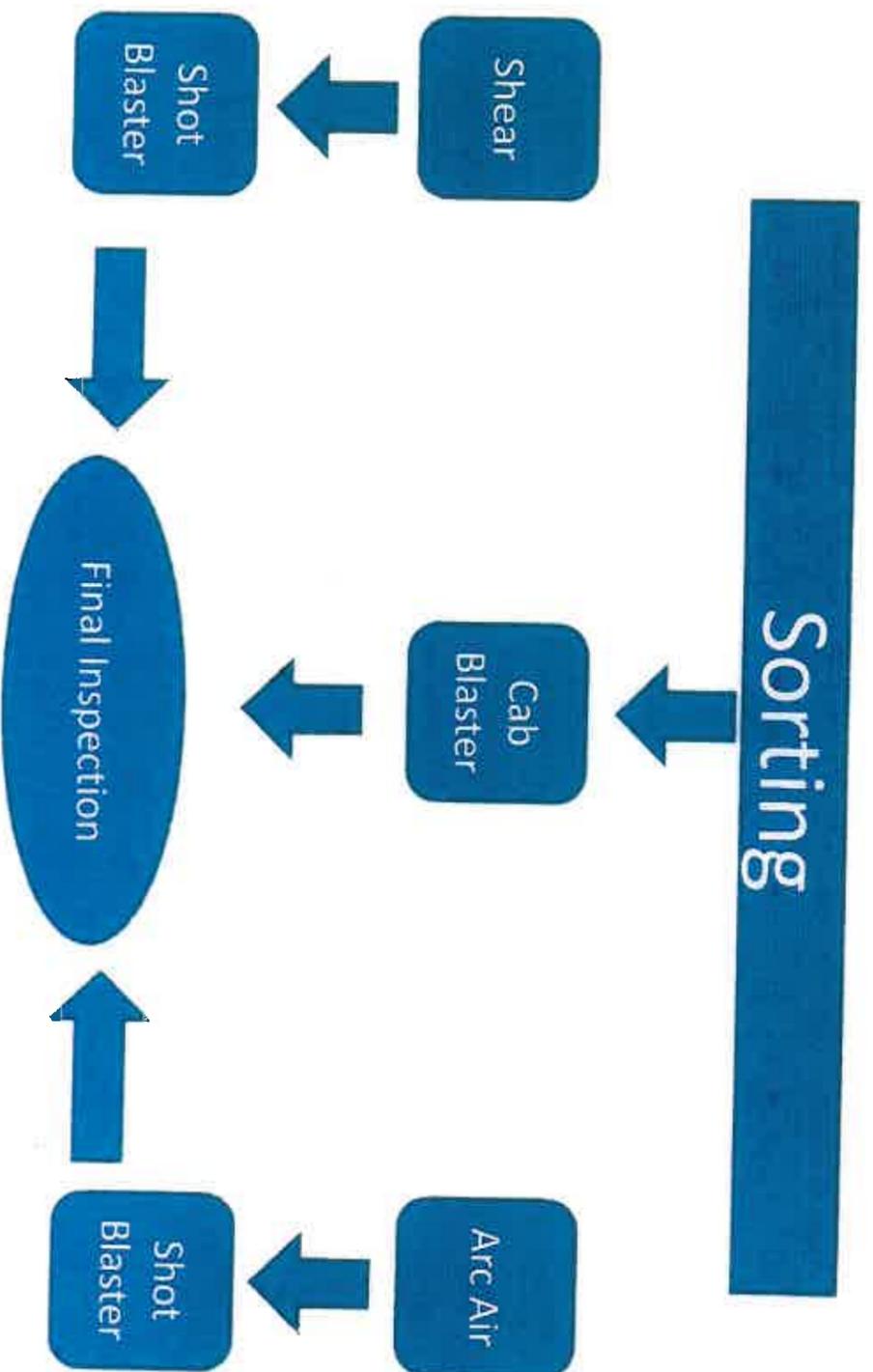
TP-2-P TP-13-P  
 TP-3-P TP-14-P  
 TP-4-P TP-15-P  
 TP-5-P TP-16-P  
 TP-17-P  
 TP-18-P





ATTACHMENT B

# CAWV Revert Process Flow



**ATTACHMENT E**

Attachment E Supporting Emissions Calculations

**Tumble Blaster**

$$MaxDustEscaping \left( \frac{mg}{m^3} \right) \times FanCapacity \left( \frac{m^3}{hr} \right) \times Conversion \left( .002678 \frac{lb}{g} \right) = Emissions \frac{lb}{hr}$$

Unit	Maximum Dust Allowed	Fan Capacity	Conversion	Controlled Emissions (PM)	
				lb/hr	tons/year
TP-10P	5 mg	10,000 m3/hr	0.002678	0.13	0.59

Note: This is based on baghouse specifications. Specifications for the tumble blaster separate from the bag house do not exist as they are inseparable for the process. Additionally, the emission factor in AP42 associated with abrasive blasting of metal parts specifies a baghouse must be in place. We believe this unit meets the criteria.

**Alternative**

**TUMBLE BLASTING**

Aggregate Used	Emission Factor	Controlled Emissions (PM)		Uncontrolled Emissions (PM)	
		lb/hr	tons/yr	lb/hr	tons/yr
8.40	0.89	0.01	0.03	0.58	2.54

From AP42 13.2.6. Thistle estimates it's maximum shot usage at 100 lbs/day. As a conservative approach I have doubled it to arrive at shot usage of 200 lbs/day or 8.4 lbs/hr. I back calculated Uncontrolled Emissions using a 99% control efficiency of the baghouse.