



west virginia department of environmental protection

Division of Air Quality
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Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-1646A
Plant ID No.: 011-00007
Applicant: Huntington Alloys Corporation
Facility Name: Huntington Facility
Location: Cabell County
NAICS Code: 331491, 331419, 332114
Application Type: Class II Administrative Update
Received Date: October 27, 2014, Resubmitted February 7, 2015
Engineer Assigned: Steven R. Pursley, PE
Fee Amount: \$300.00
Date Received: October 28, 2014
Complete Date: November 26, 2014, March 2, 2015
Due Date: January 23, 2015, May 1, 2015
Applicant Ad Date: October 28, 2014, January 30, 2015
Newspaper: *Herald Dispatch*
UTM's: Easting: 379.2 km Northing: 4,252.30 km Zone: 17
Description: Addition of a 50 foot long Bar/Rod aging and annealing heat treat system consisting of a natural gas Tip-up Furnace, Quench Tank and Manipulator.

DESCRIPTION OF PROCESS

Huntington Alloys is proposing to install a 15.2 mmbtu/hr, natural gas fired "Aging and Annealing Tip-Up Furnace" in their existing machine shop building. The furnace is designed for annealing up to 30,000 pounds per hour of rods and bars. Material from various departments at the facility is loaded into the furnace. The material is then either hardened or softened depending on the amount of heat and time the material is in the furnace. The material is then removed from the furnace and is either air cooled or water quenched based on the customer requirements and moved to the next production process.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions from the furnace were based on AP-42 Tables 1.4-1 and 1.4-2. It should be noted that the application originally used emission factors from an outdated version of AP-42. The writer contacted the company and informed them of their mistake. Huntington Alloys then corrected the calculations and submitted them on February 7, 2015.

Emissions from the furnace will be limited to the following:

Pollutant	lbs/hr	tpy
NO _x	1.45	6.34
CO	1.22	5.33
PM/PM ₁₀ /PM _{2.5}	0.11	0.48
VOC	0.08	0.35
SO ₂	0.01	0.04
HAPs	0.03	0.12

REGULATORY APPLICABILITY

The following rules apply to the modification of the facility:

45CSR7 To Prevent and Control Particulate Matter Air Pollution From Manufacturing Processes and Associated Operations.

The main requirement of 45CSR7 is the process weight rate based PM stack emission rate in section 4 of the rule. Based on a type "a" source with a process weight rate of 30,000 pounds per hour, the rule limits PM emissions to 22 pounds per hour. Actual emissions from the furnace will be limited to 0.11 pounds per hour.

45CSR10 To Prevent and Control Air Pollution From the Emission of Sulfur Oxides.

45CSR10 section 4.1 limits the in stack SO₂ concentration to 2,000 ppm. The furnace is a source of SO₂ emissions. However, given the exclusive use of natural gas as a fuel and the resulting emissions of only 0.01 pounds per hour, this requirement should be easily met.

45CSR13 Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation).

The modification of the Huntington Alloys facility is subject to substantive requirements of state rules and, therefore, pursuant to §45-13-2.24a, the furnace is defined as a "stationary source" under 45CSR13. Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction . . . and operation of any stationary source to be commenced without . . . obtaining a permit to construct." Therefore, Huntington Alloys is required to obtain a permit registration under 45CSR13 for the modification and operation of the furnace.

As required under §45-13-8.3 ("Notice Level A"), Huntington Alloys initially placed a Class I legal advertisement in a "newspaper of general circulation in the area where the source is . . . located." The ad ran on October 28, 2014 in *The Herald Dispatch* and the affidavit of publication was received by the DAQ on November 7, 2014. However, during review of the application, it was discovered by the writer that the emission factors used to calculate emissions from the furnace were based on an outdated (Pre 1995) version of AP-42. Using the correct emission factors increased calculated emissions. Therefore, on January 28, 2015, the writer notified Huntington Alloys that they needed to correct and rerun the ad. The applicant then corrected and reran the ad on January 30, 2015 and the affidavit of publication was received on March 2, 2015.

45CSR30 Requirements for Operating Permits.

The facility is an existing 45CSR30 major source. Their Title V permit application will need to be updated in accordance with 45SCR30.

MONITORING OF OPERATIONS

The permit will require Huntington Alloys to monitor and record the amount of natural gas fired by the furnace on a monthly basis.

CHANGES TO PERMIT R13-1646

R13-1646 was an old 3 page permit. R13-1646A is essentially a new permit which simply incorporates a couple of the requirements of R13-1646.

Fact Sheet R13-1646A
Huntington Alloys Corporation
Huntington, WV

RECOMMENDATION TO DIRECTOR

Information supplied in the application indicates that compliance with all applicable regulations will be achieved. Therefore it is the recommendation of the writer that permit R13-1646A for the addition of a furnace to the Huntington Facility in Cabell County, be granted to Huntington Alloys Corporation.



Steven R. Pursley, PE
Engineer

3-2-15

March 2, 2015



Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

Company:	Huntington Alloys		Facility:	Huntington	
Region:	3	Plant ID:	011-00007	Application #:	13-1646A
Engineer:	Pursley, Steve		Category:	Alloy	
Physical Address:	3200 Riverside Drive Huntington WV 25705		SIC:	[3449] FABRICATED METAL PRODUCTS, EXCEPT MACHINERY & TRAN - MISCELLANEOUS METAL WORK	
County:	Cabell		NAICS:	[332114] Custom Roll Forming	
Other Parties:			SIC:	[3339] PRIMARY METAL INDUSTRIES - PRIMARY NONFERROUS METALS, NEC	
			NAICS:	[331419] Primary Smelting and Refining of Nonferrous Metal (except Copper and Aluminum)	
			SIC:	[3356] PRIMARY METAL INDUSTRIES - NONFERROUS ROLLING AND DRAWING	
			NAICS:	[331491] Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding	

Information Needed for Database and AIRS
 1. Need valid physical West Virginia address with zip
 2. Pending result: code (99) more than two months old

Summary from this Permit 13-1646A		Regulated Pollutants	Notes from Database
Air Programs	Applicable Regulations		
TITLE V			
Title V/Major			
Fee Program	Fee	Application Type	
	\$300.00	ADMINISTRATIVE	

Activity Dates	
APPLICATION RECIEVED	10/27/2014
APPLICANT PUBLISHED LEGAL AD	10/27/2014
APPLICATION FEE PAID	10/28/2014
ASSIGNED DATE	10/28/2014
APPLICATION DEEMED COMPLETE	11/26/2014
NOD SENT	01/28/2015
APPLICANT PUBLISHED LEGAL AD	01/30/2015
APPLICATION RESUBMITTAL	02/07/2015
APPLICATION DEEMED COMPLETE	03/02/2015
PERMIT APPROVED	03/05/2015

NON-CONFIDENTIAL

Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 011-00007
 Company: Huntington Alloys
 Printed: 03/04/2015
 Engineer: Pursley, Steve