



west virginia department of environmental protection

Division of Air Quality
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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: R13-2163A
Plant ID No.: 011-00007
Applicant: Huntington Alloys
Facility Name: Huntington
Location: Huntington, Cabell County
SIC Code: 331491
Application Type: Modification
Received Date: October 1, 2010
Engineer Assigned: Roy F. Kees, P.E.
Fee Amount: \$1000.00
Date Received: October 7, 2010
Complete Date: November 10, 2010
Due Date: February 8, 2011
Applicant Ad Date: September 30, 2010
Newspaper: *Herald Dispatch*
UTM's: Easting: 379.200 km Northing: 4252.300 km Zone: 17
Description: Application to construct an abrasive saw in the Cold Draw Department.

DESCRIPTION OF PROCESS

The abrasive saw will be located on the East end of the Cold Draw Department. Alloy tubes, rods and rounds will be taken to the saw to be finish cut into customer specifications. The alloy will then be transported to the shipping center where it will be prepared for shipment.

SITE INSPECTION

A site inspection was not deemed necessary at this time due to the location of the saw and the very small emission rates of the process.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The emission calculations were provided by Huntington Alloys and reviewed by the writer for accuracy. The maximum controlled emissions from the sawing operations are listed below based on the use of a cyclone and baghouse.

Emission Point	Pollutant	Hourly Emissions (lb/hr)	Annual Emissions (tons/year)
CD-40-P Abrasion Saw	Particulate Matter ₁₀	0.03	0.12
	Aluminum	<0.01	0.01
	Chromium	<0.01	0.01
	Cobalt	<0.01	<0.01
	Copper	<0.01	<0.01
	Iron	<0.01	0.03
	Manganese	<0.01	<0.01
	Molybdenum	<0.01	<0.01
	Nickel	<0.01	0.04
	Tantalum	<0.01	<0.01
	Titanium	<0.01	<0.01
	Tungsten	<0.01	<0.01
	Aluminum Oxide	<0.01	0.02

REGULATORY APPLICABILITY

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

The facility is subject to the requirements of 45CSR7 because it meets the definition of "Manufacturing Process" found in subsection 45CSR7.2.20. The facility should be in compliance with Subsection 3.1 (no greater than 20% opacity), Subsection 4.1 (PM emissions shall not exceed those allowed under Table 45-7A), Subsection 5.1 (manufacturing process and storage structures must be equipped with a system to minimize emissions).

According to Table 45-7A, for a type 'a' source with a maximum process weight rate of 5,708 lb/hour, the maximum allowable emission rate is approximately 6 lb/hour of particulate matter. The maximum controlled emission rate is 0.03 lb/hour of particulate matter according to estimated emissions in fact sheet R13-2163A.

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

The proposed facility is subject to the requirements of 45CSR13 because it has the potential to discharge 8.58 tons per year of Nickel, a HAP, thus constituting a stationary source (2.24.c). The applicant submitted the proper application fee of \$1000.00 and published a Class I legal advertisement in *The Herald Dispatch* on September 30, 2010.

45CSR22 Air Quality Management Fee Program

This rule establishes a program to collect fees for certificates to operate and for permits to construct, modify or relocate sources of air pollution. Funds collected from these fees will be used to supplement the Director's budget for the purpose of maintaining an effective air quality management program. The facility will demonstrate compliance with this rule by obtaining a Certificate to Operate (CTO) and paying annual fees in order to maintain a current CTO.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the majority of the pollutants being emitted from this facility are PM₁₀ (particulate matter less than 10 microns in diameter). Minute quantities of Nickel are present, 0.04 tons per year.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the size and location of this facility and the limits of the permit. The facility is located in Cabell County, WV, which is currently in attainment for PM (particulate matter) and PM₁₀ (particulate matter less than 10 microns in diameter).

MONITORING OF OPERATIONS

Monthly visual emission checks should be conducted to ensure compliance with 45CSR7. Material throughput weights should also be monitored to ensure compliance with permit R13-2163A. Records of the visual emission checks as well as the yearly throughput shall be maintained on site.

CHANGES TO PERMIT R13-2163

R13-2163 will be modified to include the addition of the abrasive saw and associated control equipment.

RECOMMENDATION TO DIRECTOR

The information contained in this construction application indicates that compliance with all applicable regulations should be achieved when all proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. No comments were received. Therefore, the granting of a permit to Huntington Alloys for the construction of an abrasive saw to be located in the Cold Draw Department of the Huntington Facility in Cabell County, WV is hereby recommended.

Roy F. Kees, P.E.
Engineer - NSR Permitting

Date