



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: September 21, 2011

RE: Huntington Alloys Corporation / 039-30767-00222

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot12/3/07



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Glenda Bowman
Huntington Alloys Corporation
52800 Higgins Blvd.
Elkhart, IN 46514

September 21, 2011

Re: Exempt Construction and Operation Status,
EX 039-30767-00222

Dear Ms. Bowman:

The application from Huntington Alloys Corporation, received on August 2, 2011 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following stationary cold rolling, annealing, slitting of nickel-based coil form alloys and wire drawing operation located at 52800 Higgins Blvd., Elkhart, Indiana 46514 is classified as exempt from air pollution permit requirements:

- (a) One (1) natural gas-fired boiler, identified as E01, constructed in or prior to 1984, with a maximum heat input capacity of 12.59 mmBtu per hour.
- (b) One (1) anneal scrubber tank, identified as E02, constructed in or prior to 1984, with a maximum capacity of 900 gallons.
- (c) One (1) induced draft cooling tower, identified as E03, constructed in or prior to 1984, with a maximum capacity of 367,920,000 gallons per year.
- (d) One (1) natural gas-fired boiler, identified as A01, approved for construction in 2011, with a maximum heat input capacity of 1.26 mmBtu per hour.
- (e) One (1) pre-coating dip tank, identified as A02, approved for construction in 2011, with a maximum capacity of 4,588 gallons.
- (f) Three (3) acid baths, identified as A03, A05, and A07, approved for construction in 2011, with a maximum capacity of 134 gallons, 238 gallons, and 75 gallons, respectively.
- (g) Three (3) acid storage tanks, identified as A04, A06, and A08, approved for construction in 2011, with a maximum capacity of 379 gallons, 384 gallons, and 145 gallons, respectively.
- (h) One (1) wire drawing system, identified as A09, approved for construction in 2011, with an average capacity of 1,142 pounds per hour, ranging in diameter from 0.005 inch to 1 inch.
- (i) One (1) induced draft cooling tower, identified as A10, approved for construction in 2011, with a maximum capacity of 275,940,000 gallons per year.
- (j) One (1) cleaning tank, identified as Tank 3, approved for construction in 2011, with a maximum capacity of 2,300 gallons.
- (k) One (1) acid holding tank, identified as Tank 2, approved for construction in 2011, with a maximum capacity of 1,945 gallons.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 6-2-4 (PM Emission Limit for Indirect Heating Units), the two (2) boilers, E01 with a maximum design capacity of 12.59 mmBtu/hr and A01 with a maximum design capacity of 1.26 mmBtu/hr, shall not emit PM greater than 0.56 lbs/mmBtu heat input and 0.55 lbs/mmBtu heat input, respectively.

Pursuant to 326 IAC 6-2-4, indirect heating units constructed after September 21, 1983 shall be limited using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

- (a) Boiler E01 (installed in 1984)
Q = 12.59
Pt = $1.09 / (12.59)^{0.26} = 0.56$ lbs PM/mmBtu heat input
- (b) Boiler A01 (installed in 2011)
Q = 13.85 = 12.59 + 1.26
Pt = $1.09 / (13.85)^{0.26} = 0.55$ lbs PM/mmBtu heat input

- (2) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (3) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (4) 326 IAC 8-3-2 (Cold Cleaner Operations)
Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:
- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
 - (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (5) 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)
- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

This exemption is the first air approval issued to this source. A copy of the Exemption is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions on this matter, please contact Sarah Germann, of my staff, at 317-232-8427 or at 1-800-451-6027 (ext 2-8427).

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/sg

Attachments: Technical Support Document
Appendix A – Emissions Calculations

cc: File - Elkhart County
Elkhart County Health Department
Compliance and Enforcement Branch
Billing, Licensing and Training Section

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Description and Location

Source Name:	Huntington Alloys Corporation
Source Location:	52800 Higgins Blvd, Elkhart, IN 46514
County:	Elkhart
SIC Code:	3356 (Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum)
Exemption No.:	EX 039-30767-00222
Permit Reviewer:	Sarah Germann

On August 2, 2011 the Office of Air Quality (OAQ) received an application from Huntington Alloys Corporation related to the construction and operation of new emission units from an out of state wire drawing facility and the continued operation of an existing stationary cold rolling, annealing, and slitting of nickel-based coil form alloys operation.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
 Elkhart County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5}

emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
Elkhart County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Huntington Alloys Corporation on August 2, 2011 relating to the request for a letter of exempt operation status. Huntington Alloys Corporation will be consolidating emission units from an out-of-state facility with its existing facility located at 52800 Higgins Blvd., Elkhart, Indiana. Huntington Alloys Corporation took over ownership and operation of the source at 52800 Higgins Blvd., Elkhart, Indiana on September 23, 1986, and there were some existing emission units in place at that time. This source has been considered to be under exemption thresholds for all regulated criteria pollutants as listed in 326 IAC 2-1.1-3(e)(1), however the request for exempt operation status on August 2, 2011 is the first received by IDEM, OAQ from the source.

The source consists of the following existing emission unit(s):

- (a) One (1) natural gas-fired boiler, identified as E01, constructed in or prior to 1984, with a maximum heat input capacity of 12.59 mmBtu per hour.
- (b) One (1) anneal scrubber tank, identified as E02, constructed in or prior to 1984, with a maximum capacity of 900 gallons.
- (c) One (1) induced draft cooling tower, identified as E03, constructed in or prior to 1984, with a maximum capacity of 367,920,000 gallons per year.

Note: Huntington Alloys Corporation took over the operation of the above mentioned emissions units on September 23, 1986.

The following is a list of the new emission unit(s):

- (d) One (1) natural gas-fired boiler, identified as A01, approved for construction in 2011, with a maximum heat input capacity of 1.26 mmBtu per hour.
- (e) One (1) pre-coating dip tank, identified as A02, approved for construction in 2011, with a maximum capacity of 4,588 gallons.
- (f) Three (3) acid baths, identified as A03, A05, and A07, approved for construction in 2011, with a maximum capacity of 134 gallons, 238 gallons, and 75 gallons, respectively.
- (g) Three (3) acid storage tanks, identified as A04, A06, and A08, approved for construction in 2011, with a maximum capacity of 379 gallons, 384 gallons, and 145 gallons, respectively.

- (h) One (1) wire drawing system, identified as A09, approved for construction in 2011, with an average capacity of 1,142 pounds per hour, ranging in diameter from 0.005 inch to 1 inch.
- (i) One (1) induced draft cooling tower, identified as A10, approved for construction in 2011, with a maximum capacity of 275,940,000 gallons per year.
- (j) One (1) cleaning tank, identified as Tank 3, approved for construction in 2011, with a maximum capacity of 2,300 gallons.
- (k) One (1) acid holding tank, identified as Tank 2, approved for construction in 2011, with a maximum capacity of 1,945 gallons.

Note that there are three (3) electric annealing furnaces, identified as "CM Furnace," "Old Furnace" and "New Furnace," used in the wire drawing process. These three (3) furnaces use Hydrogen and Argon and therefore have no emissions.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Exemption

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Boilers	0.12	0.46	0.46	0.04	6.07	0.33	5.10	7,326	0.11	0.1092 Hexane
Tanks	0.12	0.12	0.12	-	-	2.84	-	-	-	-
Cooling Towers	0.61	0.61	0.61	-	-	-	-	-	-	-
Wire Drawing	1.11	1.11	1.11	-	-	-	-	-	-	-
Total PTE of Entire Source	1.96	2.30	2.30	0.04	6.07	3.18	5.10	7,326	0.11	0.11
Exemptions Levels**	5	5	5	10	10	10	25	100,000	25	10
Registration Levels**	25	25	25	25	25	25	100	100,000	25	10

*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
 **The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Db (326 IAC 12), are not included in the permit, since the two boilers, identified as E01 and A01, have a maximum design heat input capacity of less than one hundred (100) million Btu per hour.
- (b) The requirements of the New Source Performance Standard for Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit, since the boiler identified as E01 with a maximum heat input capacity of 12.59 million Btu per hour was constructed prior to June 9, 1989, and the boiler identified as A01 located at the source has a maximum design heat input capacity of less than ten (10) million Btu per hour.
- (c) The requirements of the New Source Performance Standard for Standards of Petroleum for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb (326 IAC 12), are not included in the permit, since tanks E02, A02, A03, A04, A05, A06, A07, A08, Top Cleaning Tank and Bottom Cleaning Tank each have a maximum storage capacity less than 75 cubic meters (19,813 gallons).
- (d) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers, 40 CFR 63, Subpart Q (326 IAC 20-4-1), are not included in the permit, since this source is not a major source of HAPs.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63, Subpart JJJJJJ (6J), are not included in the permit for the natural gas-fired boilers, identified as A01 and E01, since gas-fired boilers, as define in 40 CFR 63.11237, are specifically exempted from this rule as indicated in 40 CFR 63.11195(e).
- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating

and Polishing Operations, 40 CFR 63, Subpart WWWW (6W) are not included in the permit, since the source does not own or operate a plating and polishing facility as defined in 40 CFR 63.11511.

- (h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63, Subpart XXXXX (6X) (326 IAC 20), are not included in this permit, because this source is not primarily engaged in the operations in one of the nine metal fabrication and finishing source categories, as defined in 40 CFR 63.11514 and 63.11522.
- (i) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (j) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-1.1-3 (Exemptions)
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

Cold rolling, annealing, slitting of nickel-based coil form alloys and wire drawing operation

- (f) 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units constructed after September 21, 1983 shall be limited using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

- (1) For Boiler E01 (installed in 1984)
Q= 12.59
Pt = 1.09/(12.59)^{0.26} = 0.56 lbs PM/mmBtu heat input
- (2) For Boiler A01 (installed in 2011)
Q= 13.85 = 12.59 + 1.26
Pt = 1.09/(13.85)^{0.26} = 0.55 lbs PM/mmBtu heat input

Based on Appendix A, the potential to emit of PM from the two (2) boilers identified as E01 and A01, both constructed after September 21, 1983, is 0.12 tons per year.

For E01 and A01:

$$PM = 0.12 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.026 \text{ lbs/hr}$$
$$PM = (0.026 \text{ lbs/hr} / 13.85 \text{ mmBtu/hr}) = 0.0019 \text{ lbs PM/mmBtu}$$

Therefore, the two (2) boilers, identified as E01 and A01, will be able to comply with this rule.

- (g) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The boilers, identified as E01 and A01, are each exempt from the requirements of 326 IAC 6-3 since they are sources of indirect heating.
- (h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(11), noncontact towers are exempt from 326 IAC 6-3; therefore the provisions of 326 IAC 6-3-2 are not included for the two (2) cooling towers, identified as E03 and A10.
- (i) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (j) 326 IAC 7-1.1-1 (Sulfur Dioxide Emissions Limitations)
The requirements of 326 IAC 7-1.1 are not applicable to the two (2) boilers, identified as A01 and E01, because the potential to emit sulfur dioxide (SO₂) from each boiler is less than ten (10) pounds per hour and twenty-five (25) tons per year.

- (k) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.
- (l) 326 IAC 8-3-2 (Cold Cleaner Operations)
The one (1) cleaning tank, identified as Tank 3, is subject to the requirements of this rule because it was constructed after January 1, 1980. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:
- (a) Equip the cleaner with a cover;
 - (b) Equip the cleaner with a facility for draining cleaned parts;
 - (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
 - (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (e) Provide a permanent, conspicuous label summarizing the operation requirements;
 - (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)

The one (1) cleaning tank, identified as Tank 3, is subject to the requirements of this rule because it was constructed after July 1, 1990.

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.
- (m) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (n) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on August 2, 2011.

The construction and operation of this source shall be subject to the conditions of the attached proposed Exemption No. 039-30767-00222. The staff recommends to the Commissioner that this Exemption be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Sarah Germann at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8427 or toll free at 1-800-451-6027 extension 2-8427.

- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

**Appendix A: Emissions Calculations
Summary**

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Boilers	0.12	0.46	0.46	0.04	6.07	0.33	5.10	7,326	0.11	0.1092 Hexane
Tanks	0.12	0.12	0.12	-	-	2.84	-	-	-	-
Cooling Towers	0.61	0.61	0.61	-	-	-	-	-	-	-
Wire Drawing	1.11	1.11	1.11	-	-	-	-	-	-	-
Total PTE of Entire Source	1.96	2.30	2.30	0.04	6.07	3.18	5.10	7,326	0.11	0.11
Exemptions Levels**	5	5	5	10	10	10	25	100,000	25	10
Registration Levels**	25	25	25	25	25	25	100	100,000	25	10
<p>*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.</p> <p>**The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.</p>										

**Appendix A: Emissions Calculations
Natural Gas Combustion Only**

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

Number of Emission Units	Emission Unit Description	Heat Input Capacity (MMBtu/hr)	Total Heat Input Capacity (MMBtu/hr)
1	Boiler A01	1.26	1.26
1	Boiler E01	12.59	12.59
Total			13.85

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
13.85	1000	121.4

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.12	0.46	0.46	0.04	6.07	0.33	5.10

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See following page for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
HAPs Emissions**

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.274E-04	7.282E-05	4.551E-03	1.092E-01	2.063E-04

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.034E-05	6.675E-05	8.495E-05	2.306E-05	1.274E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See following page for Greenhouse Gas calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
Greenhouse Gas Emissions**

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	7,282	0.1	0.1
Summed Potential Emissions in tons/yr	7,282		
CO2e Total in tons/yr	7,326		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations
Data for Caustic Tank, Dip Tank, Acid Tanks, and Cleaning Tanks

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

Tanks with Particulate Emissions										
Tank ID	Process	Chemical Constituents	Tank Height (ft)	Tank Width (ft)	Surface Area (ft ²)	Tank Volume (gallons)	°F	°C	Vapor pressure (mmHg) ⁽⁶⁾	Vapor pressure (psia) ⁽⁷⁾
E02	Anneal Scrubber Tank	Sodium Hydroxide Solution ⁽²⁾	6.00	8.00	48.00	900	150	65.6	-	-
A02	Pre-Coating Dip Tank	Aqueous solution of Vicafil TS 649 ⁽³⁾	9.42	12.75	120.06	4,588	200	93.3	-	-
A03	CM Acid Bath	Aqueous solution of 3-4% Perchem 1394 ⁽⁴⁾	2.67	6.75	18.00	134	77	25.0	0.0285	0.00055
A04	CM Acid Tank	Aqueous solution of 3-4% Perchem 1394 ⁽⁴⁾	4.58	5.50	25.21	379	130	54.4	0.0285	0.00055
A05	New Furnace ⁽¹⁾ Acid Bath	Aqueous solution of 3-4% Perchem 1394 ⁽⁴⁾	3.50	8.00	28.00	238	77	25.0	0.0285	0.00055
A06	New Furnace ⁽¹⁾ Acid Tank	Aqueous solution of 3-4% Perchem 1394 ⁽⁴⁾	4.00	7.58	30.33	384	130	54.4	0.0285	0.00055
A07	Old Furnace ⁽¹⁾ Acid Bath	Aqueous solution of 3-4% Perchem 1394 ⁽⁴⁾	3.00	7.25	21.75	75	77	25.0	0.0285	0.00055
A08	Old Furnace ⁽¹⁾ Acid Tank	Aqueous solution of 3-4% Perchem 1394 ⁽⁴⁾	2.50	6.00	15.00	145	130	54.4	0.0285	0.00055
Tank 2	Acid Holding Tank	Aqueous solution of 3-4% Perchem 1394 ⁽⁴⁾	6.67	6.50	43.33	1,945	77	25.0	0.0285	0.00055

Tanks with VOC Emissions										
Tank ID	Process	Chemical Constituents	Tank Height (ft)	Tank Width (ft)	Surface Area (ft ²)	Tank Volume (gallons)	°F	°C	Vapor pressure (mmHg) ⁽⁶⁾	Vapor pressure (psia) ⁽⁷⁾
Tank 3	Cleaning Tank	Aqueous solution of Americo Spray Clean SS99 or DUSQUEEZE ⁽⁵⁾	7.17	6.67	47.78	2,300	77	25.0	2.0000	0.03867

- Notes:**
- (1) The furnaces are hydrogen fired; product of combustion is water.
 - (2) The vapor pressure for Sodium Hydroxide is essentially zero.
 - (3) Vicafil TS 649 is < 30% Sodium Sulfate Anhydrous; Vapor pressure is not applicable for sodium sulfate anhydrous.
 - (4) Perchem 1394 is 100% Phosphoric Acid
 - (5) Both Spray Clean SS99 and DUSQUEEZE contain D-Limonene in solution with other components; assume 100% D-Limonene for calculations; using Americo Spray Clean SS has the highest possible emissions of any product used in the tanks
 - (6) Vapor pressure (in mmHg) at 20°C
 - (7) 1 psia=51.71493 mm Hg

See following 2 pages for PTE calculations

**Appendix A: Emissions Calculations
Tanks with Particulate Emissions (Caustic Tank, Dip Tank, Acid Tanks)**

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

PTE of PM/PM10/PM2.5 calculations using Clement's Vaporizational Model									
Tank ID	Molecular weight (g/mol) of Chemical Constituent	Tank Area (ft ²)	Vapor pressure of chemical (psia at T ₁)	R = Universal gas constant (psia-ft ³ /°R-lb mole)	°R	Wind speed (ft/sec)	K (gas-phase mass transfer coefficient) (ft/sec)	Vapor generation rate (lb/sec)	Vapor generation rate (PTE of PM/PM10/PM2.5 in tons per year)
E02	40.00	48.00	-	10.73	610	2.2	0.0062	-	-
A02	142.04	120.06	-	10.73	660	2.2	0.0041	-	-
A03	99.00	18.00	0.00055	10.73	537	2.2	0.0046	7.82E-07	0.0123
A04	99.00	25.21	0.00055	10.73	590	2.2	0.0046	9.97E-07	0.0157
A05	99.00	28.00	0.00055	10.73	537	2.2	0.0046	1.22E-06	0.0192
A06	99.00	30.33	0.00055	10.73	590	2.2	0.0046	1.20E-06	0.0189
A07	99.00	21.75	0.00055	10.73	537	2.2	0.0046	9.45E-07	0.0149
A08	99.00	15.00	0.00055	10.73	590	2.2	0.0046	5.93E-07	0.0094
Tank 2	99.00	43.33	0.00055	10.73	537	2.2	0.0046	1.88E-06	0.0297
TOTAL PTE									0.1201

Methodology

Clement's Vaporizational Model
 $W = MKAP^0/RT_1$

Where:

W = Vapor generation rate (lb/sec)

M = Molecular weight

K = gas-phase mass transfer coefficient (ft/sec)

A = Area (ft²)

P^o = Vapor pressure of chemical (psia at T₁)

R = universal gas constant (10.73 psia-ft³/°R-lb mole)

T₁ = Temperature (°R) , where: (°R)=(°F + 460)

$$K = 0.00438(U)^{0.78} [D/3.1 \times 10^{-4}]^{2/3}$$

$$\text{or } K = 0.00438(U)^{0.78} [18/M]^{1/3}$$

Where:

D = Diffusion coefficient for chemical in air, ft²/sec

U = Wind speed (miles/hr) (use 1.5 mile/hr or 2.2 ft/sec)

It is assumed that PM = PM10 = PM2.5

Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

Notes

** General comparison calculations were done by IDEM, OAQ using U.S. EPA TANKS 4.09d

Using three (3) different acid solutions for comparison we determined the following PTE values using characteristics of Tank A02 (the largest tank), and determined that we will use the source's calculation method for the tanks using sulfuric acid since they represent what is the worst possible PTE.

	Formic Acid	Acetic Acid	Acrylic Acid	Sulfuric Acid*
Vapor pressure (psia)	11.69	6.54	2.62	0.00055
Molecular weight	46	60.05	72	99.00
PTE (tons/year)	0.0591	0.0432	0.0207	0.0669

*Sulfuric Acid in Tank A02 would give a PTE of 0.0669 tons/year using Clement's Vaporizational Model

Vapor pressure of 100% Phosphoric Acid at 20°C, or 68°F = 0.0285 mmHg = 0.00055 psia

Vapor pressure of 5% Phosphoric Acid at 20°C, or 68°F = 17.5 mmHg = 0.33839 psia

**Appendix A: Emissions Calculations
Tanks with VOC Emissions (Cleaning Tank)**

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

PTE of VOC calculations using Clement's Vaporizational Model									
Tank ID	Molecular weight (g/mol) of Chemical Constituent	Tank Area (ft ²)	Vapor pressure of chemical (psia at T ₁)	R = Universal gas constant (psia-ft ³ /°R-lb mole)	°R	Wind speed (ft/sec)	K (gas-phase mass transfer coefficient) (ft/sec)	Vapor generation rate (lb/sec)	Vapor generation rate (PTE of VOCs in tons per year)*
Tank 3	136.23	47.78	0.03867	10.73	537	2.2	0.0041	0.000180261	2.8424
								TOTAL PTE	2.8424

Methodology

Clement's Vaporizational Model

$$W = MKAP^{\circ}/RT_1$$

Where:

W = Vapor generation rate (lb/sec)
M = Molecular weight
K = gas-phase mass transfer coefficient (ft/sec)
A = Area (ft²)
P^o = Vapor pressure of chemical (psia at T₁)
R = universal gas constant (10.73 psia-ft³/°R-lb mole)
T₁ = Temperature (°R), where: (°R)=(°F + 460)

$$K = 0.00438(U)^{0.78}[D/3.1 \times 10^{-4}]^{2/3}$$

$$\text{or } K = 0.00438(U)^{0.78}[18/M]^{1/3}$$

Where:

D = Diffusion coefficient for chemical in air, ft²/sec
U = Wind speed (miles/hr) (use 1.5 mile/hr or 2.2 ft/sec)

Notes

*Assumes worst-case: 100% D-Limonene in Tank

**Appendix A: Emissions Calculations
Cooling Towers**

**Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011**

Unit ID	Recirculation Rate (gal/min) ⁽¹⁾	Recirculation Rate (gal/hr)	Recirculation Rate (gal/year)	PM Emission Factor (lb/1,000 gal) ⁽²⁾	PTE of PM/PM10/PM2.5 (lbs/year)	PTE of PM/PM10/PM2.5 (tons/year)
Cooling Tower E03	700	42,000	367,920,000	0.0019	699.0480	0.3495
Cooling Tower A10	525	31,500	275,940,000	0.0019	524.2860	0.2621
Total					0.6117	

Methodology

The PM10 emissions from Wet Cooling Towers is published in AP-42 Section 13.4 Wet Cooling Towers dated 1/95.

AP-42 factors are based on a TDS concentration of 12,000 ppm.

Assume operation is 8,760 hours per year.

Wet Cooling towers are Induced Draft, with a PM emission factor of 0.019 lb/1,000 gal

PTE of PM/PM10/PM2.5 (lbs/year) = Recirculation Rate (gal/year) * PM Emission Factor (lb/1,000 gal)/1,000

PTE of PM/PM10/PM2.5 (tons/year) = PTE of PM/PM10/PM2.5 (lbs/year) / 2,000 (lbs/ton)

Notes

Assume that Cooling Tower will not use VOC or HAP containing chemicals.

(1) Provided by Applicant: Recirculation rate for Cooling Tower A10 = 525 gal/min; Recirculation rate for Cooling Tower E03 = 700 gal/min

**Appendix A: Emissions Calculations
Wire Drawing**

Company Name: Huntington Alloys Corporation
Source Location: 52800 Higgins Blvd, Elkhart IN 46514
Permit Number: EX 039-30767-00222
Plt ID: 039-00222
Reviewer: Sarah Germann
Date: 9/9/2011

Building ventilation rate 30,000 ft³/min
 PM over 8 hour day⁽¹⁾ 0.75294 mg/m³
 PM over 24 hour day 2.25882 mg/m³

Conversion factor 0.028317 m³/ft³
Conversion factor 2.20E-06 lb/mg

PM emitted (lb/min)
 0.00423 lb/min
 0.25 lb/hour

2,223.50 lb/year⁽²⁾

1.11 tons per year PTE of PM/PM10/PM2.5

Methodology

(1) Calculations are based on test results at the A-1 facility in Rockford, IL. Huntington Alloys Corporation is moving equipment from this wire drawing facility to the Elkhart, Indiana location. Industrial Hygiene (IH) samples have been collected near the wire drawing operations using NIOSH Methods over an eight (8) hour work day. IDEM, OAQ will assume 24 hours of operation.

PM over a 24 hour day (mg/m³) = [PM over an 8 hour day (mg/m³)] * 3
 PM emitted (lb/min) = [Ventilation rate (ft³/min)] * [PM over a 24 hour day (mg/m³)] * [0.0283169 m³/ft³] * [2.20E-06 lb/mg]

(2) Assume operating at 8760 hours per year

A maximum of 10,000,000 pounds of wire ranging in diameter from 0.005 inch to 1 inch is processed annually
 The wire is dipped in a soap like powder to provide lubricant for the drawing process
 Once dipped the wire is drawn through a die to reduce the diameter. The process is repeated until the desired diameter is obtained.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Glenda Bowman
Huntington Alloys Corporation
52800 Higgins Blvd
Elkhart, IN 46514

DATE: September 21, 2011

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Exemption
039-30767-00222

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Bill Belcher – Plant Manager
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 9/21/2011 Huntington Alloys Corporation 039-30767-00222 Final		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Glenda Bowman Huntington Alloys Corporation 52800 Higgins Blvd Elkhart IN 46514 (Source CAATS) via confirmed delivery										
2		Bill Belcher Plant Mgr Huntington Alloys Corporation 52800 Higgins Blvd Elkhart IN 46514 (RO CAATS)										
3		Elkhart City Council and Mayors Office 229 South Second Street Elkhart IN 46516 (Local Official)										
4		Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 (Health Department)										
5		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 (Affected Party)										
6		Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 (Local Official)										
7		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 (Affected Party)										
8												
9												
10												
11												
12												
13												
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Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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