

Mr. Mark Lennart
KUS Zollner Division
2425 Coliseum Boulevard South
Fort Wayne, Indiana 46803

Re: 003-15448
Second Administrative Amendment to
FESOP 003-5869-00064

Dear Mr. Lennart:

KUS Zollner Division was issued a permit on December 9, 1996 for a stationary aluminum foundry. A letter requesting a modification to add three (3) new anodizing lines to the existing source was received on April 4, 2002. Pursuant to the provisions of 326 IAC 2-8-10 the permit is hereby administratively amended as follows:

1. Section A.3 of the FESOP is revised as follows to include the new emission units, which are insignificant activities, being added to the source (additions in bold, deletions in strikeout):

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) natural gas-fired combustion sources with heat input equal to or less than ten million British thermal units per hour, including the following:
 - (1) four (4) 200 hp, natural gas-fired boilers, with maximum heat input capacities of 8.4, 5.6, 2.5, and 6.7 million British thermal units per hour, referred to as B1, B2, B4, and B5 respectively;
 - (2) one (1) 100 hp, natural gas-fired boiler, with a maximum heat input capacity of 3.35 million British thermal units per hour, referred to as B3; and
 - (3) one (1) natural gas-fired boiler, with a maximum heat input capacity of 1.25 million British thermal units per hour, referred to as B6.
- (b) a gasoline fuel transfer and dispensing operation;
- (c) storage tanks;
- (d) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (e) activities associated with the treatment of wastewater streams;
- (f) quenching operations used with heat treating processes;
- (g) replacement or repair of electrostatic precipitators, bags in baghouses and filters in other

air filtration equipment;

- (h) trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;
- (i) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
 - (1) two (2) shot blast systems, each with a maximum throughput capacity of 800 pounds of processed metal per hour, each with emissions controlled by one (1) baghouse;
- (j) a coating operation and curing oven for surface coating pistons which includes a pre-washer, dryer, print coating, and a curing oven (pre-heating and curing oven);
- (k) a phosphate pretreat line, consisting of six dip tanks connected to a mist eliminator;
- (l) an electric bake oven (14kW) to bake and cure a maximum of 80 pounds per hour graphite coated aluminum pistons;
- (m) a tin plating line, consisting of six dip tanks connected to a wet collector;
- (n) five parts washers (PW1 - 5) for washing cutting fluid off pistons;
- (o) two board washers (BW1 - 2) for washing cutting fluid off pistons;
- (p) two tin plating systems which include a detergent washer section, surface pretreatment, and plating and rinse sections;
- (q) lathe room exhaust system to remove gaseous emissions;
- (r) maintenance welding operations and maintenance brazing operations;
- (s) diesel testing cells;
- (t) The following facilities with emissions below insignificant thresholds:
 - (1) ten (10) natural gas-fired reverberatory furnaces, each with a maximum melt capacity of 800 pounds per hour, referred to as F4 - F5, F11 - F12, F17 - F18, and F20 - F23. Furnaces F4 - F5, F17 - F18, and F22 each have a maximum heat input capacity of 2.4 million British thermal units (MMBtu) per hour. Furnaces F11 - F12 and F20 - F21 each have a maximum heat input capacity of 3.1 MMBtu per hour. Furnace F23 has a maximum heat input capacity of 3.0 MMBtu per hour;
 - (2) one (1) natural gas-fired reverberatory furnace, with a maximum heat input capacity of 4.6 MMBtu per hour, and a maximum melt capacity of 2,000 pounds per hour, identified as F14;
 - (3) One (1) dry hearth furnace, fueled by natural gas only, with a heat input capacity of 5.1 million British thermal units per hour, and a charging capacity of 2000 pounds

per hour, identified as F13;

- (4) One (1) melt furnace, identified as M1, with a maximum melt capacity of 1,200 pounds per hour, equipped with one (1) natural gas-fired melt burner, with a maximum heat input capacity of 2.0 million British thermal units (MMBtu) per hour, and two (2) natural gas-fired flat flame holding burners, each with a maximum heat input capacity of 1.0 MMBtu per hour;
 - (5) One (1) natural gas-fired melt furnace, with a maximum melt capacity of 2,500 pounds per hour, and a maximum heat input capacity of 5.5 MMBtu per hour, identified as M4;
 - (6) forty-eight (48) natural gas-fired crucible furnaces, each with a maximum melt capacity of 200 pounds per hour, and each with a maximum heat input capacity of 0.5 MMBtu per hour, referred to as C1a - C48a;
 - (7) eleven (11) natural gas-fired crucible furnaces, each with a maximum melt capacity of 400 pounds per hour, and each with a maximum heat input capacity of 1.0 MMBtu per hour, identified as C1b - C11b;
 - (8) two (2) natural gas-fired crucible furnaces, each with a maximum melt capacity of 600 pounds per hour, and each with a maximum heat input capacity of 1.0 MMBtu per hour, identified as C1c and C2c;
- (u) **VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. These units also have potential PM, PM10, and SO₂ emissions below insignificant thresholds:**
- (1) **one (1) anodizing line, identified as Anodizing Line #1, processing a maximum of 480 pistons per hour, consisting of the following:**
 - (A) **one (1) covered electrolyte holding tank with a maximum capacity of 300 gallons;**
 - (B) **one (1) rectifier; and**
 - (C) **one (1) packed bed scrubber for control of sulfur dioxide and sulfuric acid mist emissions from the holding tank, exhausting through one (1) stack, SCR1, which exhausts inside the building;**
 - (2) **one (1) anodizing line, identified as Anodizing Line #2, processing a maximum of 480 pistons per hour, consisting of the following:**
 - (A) **one (1) covered electrolyte holding tank with a maximum capacity of 300 gallons;**
 - (B) **one (1) rectifier; and**
 - (C) **one (1) packed bed scrubber for control of sulfur dioxide and sulfuric acid mist emissions from the holding tank, exhausting through one (1) stack, SCR2, which exhausts inside the building;**
 - (3) **one (1) anodizing line, identified as Anodizing Line #3, processing a maximum of 480 pistons per hour, consisting of the following:**
 - (A) **one (1) covered electrolyte holding tank with a maximum capacity of 300 gallons;**
 - (B) **one (1) rectifier; and**
 - (C) **one (1) packed bed scrubber for control of sulfur dioxide and sulfuric acid mist emissions from the holding tank, exhausting through one (1) stack, SCR3, which exhausts inside the building;**

2. The three (3) anodizing lines listed above do not use chromic acid, therefore, they are not subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR 63.340 - 63.347, Subpart N, "National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks". Any change or modification in which the electrolyte solution is changed to a chromic acid solution shall require prior approval from the OAQ before such change occurs.
3. Testing was not required for the anodizing lines because emissions for these types of operations are similar to emissions from chromium electroplating. Based on sources that perform chromium electroplating in Indiana, these emissions are typically at exempt levels. Therefore, since this is an anodizing process using sulfuric acid, not chromic acid, it is assumed that emissions will be lower than that for chromium electroplating so no testing was required.

Since there are no other rules that apply specifically to the three (3) anodizing lines, and no limits are required to comply with the limits pursuant to 326 IAC 2-8 (FESOP), these units will not be included in section D of the FESOP.

(Note: Upon issuance of Significant Permit Revision No. 003-13612-00064, on August 20, 2001, this source became subject to the requirements of 326 IAC 2-7 (Part 70). Therefore, this source has submitted a Part 70 permit application (003-15163-00064) that was received by the OAQ on November 15, 2001 and is currently under review.)

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Trish Earls, at (973) 575-2555, ext. 3219 or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
TE/EVP

cc: File - Allen County
U.S. EPA, Region V
Allen County Health Department
Air Compliance Section Inspector Jennifer Dorn
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michelle Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY**

**KUS Zollner Division
2425 South Coliseum Blvd.
Fort Wayne, Indiana 46803-2998**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F003-5869-00064	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 9, 1996

First Administrative Amendment 003-11216-00064, issued November 22, 1999
Exemption 003-12117-00064, issued on April 14, 2000;
Exemption 003-12315, issued on July 6, 2000;
First Significant Permit Revision 003-11697-00064, issued on April 26, 2001;
Second Significant Permit Revision 003-13612-00064, issued on August 20, 2001;

Second Administrative Amendment No.: 003-15448-00064	Pages Affected: 4, 5, 5a, 5b
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary aluminum foundry.

Authorized individual: Mark Lennart, Plant Manager/Vice President of Operations
Source Address: 2425 South Coliseum Blvd., Fort Wayne, Indiana 46803
Mailing Address: 2425 South Coliseum Blvd., Fort Wayne, Indiana 46803
Phone Number: 219-426-8081
SIC Code: 3361
County Location: Allen
County Status: Attainment for all criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD Rules
1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) one (1) evaporator, referred to as EV1.
- (b) eight (8) engine test cells, each consisting of one (1) electric dyno and one (1) gasoline or diesel fuel fired reciprocating internal combustion engine, each engine with a maximum heat input rating of 1.1 million British thermal units (MMBtu) per hour and a maximum power output rating of 450 horsepower (HP), each exhausting through one (1) stack (Stacks 1 through 8).

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) natural gas-fired combustion sources with heat input equal to or less than ten million British thermal units per hour, including the following:
 - (1) four (4) 200 hp, natural gas-fired boilers, with maximum heat input capacities of 8.4, 5.6, 2.5, and 6.7 million British thermal units per hour, referred to as B1, B2, B4, and B5 respectively;
 - (2) one (1) 100 hp, natural gas-fired boiler, with a maximum heat input capacity of 3.35 million British thermal units per hour, referred to as B3; and
 - (3) one (1) natural gas-fired boiler, with a maximum heat input capacity of 1.25 million British thermal units per hour, referred to as B6.
- (b) a gasoline fuel transfer and dispensing operation;

- (c) storage tanks;
- (d) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (e) activities associated with the treatment of wastewater streams;
- (f) quenching operations used with heat treating processes;
- (g) replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (h) trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;
- (i) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
 - (1) two (2) shot blast systems, each with a maximum throughput capacity of 800 pounds of processed metal per hour, each with emissions controlled by one (1) baghouse;
- (j) a coating operation and curing oven for surface coating pistons which includes a pre-washer, dryer, print coating, and a curing oven (pre-heating and curing oven);
- (k) a phosphate pretreat line, consisting of six dip tanks connected to a mist eliminator;
- (l) an electric bake oven (14kW) to bake and cure a maximum of 80 pounds per hour graphite coated aluminum pistons;
- (m) a tin plating line, consisting of six dip tanks connected to a wet collector;
- (n) five parts washers (PW1 - 5) for washing cutting fluid off pistons;
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- (q) lathe room exhaust system to remove gaseous emissions;
- (r) maintenance welding operations and maintenance brazing operations;
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- F20 - F23. Furnaces F4 - F5, F17 - F18, and F22 each have a maximum heat input capacity of 2.4 million British thermal units (MMBtu) per hour. Furnaces F11 - F12 and F20 - F21 each have a maximum heat input capacity of 3.1 MMBtu per hour. Furnace F23 has a maximum heat input capacity of 3.0 MMBtu per hour;
- (2) one (1) natural gas-fired reverberatory furnace, with a maximum heat input capacity of 4.6 MMBtu per hour, and a maximum melt capacity of 2,000 pounds per hour, identified as F14;
 - (3) One (1) dry hearth furnace, fueled by natural gas only, with a heat input capacity of 5.1 million British thermal units per hour, and a charging capacity of 2000 pounds per hour, identified as F13;
 - (4) One (1) melt furnace, identified as M1, with a maximum melt capacity of 1,200 pounds per hour, equipped with one (1) natural gas-fired melt burner, with a maximum heat input capacity of 2.0 million British thermal units (MMBtu) per hour, and two (2) natural gas-fired flat flame holding burners, each with a maximum heat input capacity of 1.0 MMBtu per hour;
 - (5) One (1) natural gas-fired melt furnace, with a maximum melt capacity of 2,500 pounds per hour, and a maximum heat input capacity of 5.5 MMBtu per hour, identified as M4;
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- (1) one (1) anodizing line, identified as Anodizing Line #1, processing a maximum of 480 pistons per hour, consisting of the following:
 - (A) one (1) covered electrolyte holding tank with a maximum capacity of 300 gallons;
 - (B) one (1) rectifier; and
 - (C) one (1) packed bed scrubber for control of sulfur dioxide and sulfuric acid mist emissions from the holding tank, exhausting through one (1) stack, SCR1, which exhausts inside the building;
 - (2) one (1) anodizing line, identified as Anodizing Line #2, processing a maximum of 480 pistons per hour, consisting of the following:
 - (A) one (1) covered electrolyte holding tank with a maximum capacity of 300 gallons;
 - (B) one (1) rectifier; and
 - (C) one (1) packed bed scrubber for control of sulfur dioxide and sulfuric acid mist emissions from the holding tank, exhausting through one (1) stack, SCR2, which exhausts inside the building;
 - (3) one (1) anodizing line, identified as Anodizing Line #3, processing a maximum of 480 pistons per hour, consisting of the following:

- (A) one (1) covered electrolyte holding tank with a maximum capacity of 300 gallons;
- (B) one (1) rectifier; and
- (C) one (1) packed bed scrubber for control of sulfur dioxide and sulfuric acid mist emissions from the holding tank, exhausting through one (1) stack, SCR3, which exhausts inside the building;

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to apply for a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

Pursuant to 326 IAC 2-7-4, the source shall submit a Part 70 permit application to the OAQ within twelve (12) months after the source becomes subject to the Part 70 permit program. The source will be subject to the Part 70 permit program when operation of the equipment listed in Section D.6 begins.

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

**Appendix A: Emission Calculations
Emissions Summary Of the Modification**

Company Name: KUS Zollner Division
Address City IN Zip: 2425 Coliseum Blvd. South, Fort Wayne, Indiana 46803
Administrative Amendment: 003-15448
Pit ID: 003-00064
Reviewer: Trish Earls/EVP
Date: April 4, 2002

Total Potential To Emit (tons/year)		
Emissions Generating Activity		
Pollutant	Anodizing Lines	TOTAL
PM	0.53	0.53
PM10	0.53	0.53
SO2	0.66	0.66
NOx	0.00	0.00
VOC	0.00	0.00
CO	0.00	0.00
total HAPs***	0.00	0.00
worst case single HAP***	0.00	0.00
Total emissions based on rated capacities at 8,760 hours/year.		
For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration		
Note: PM and PM10 emissions represent emissions of sulfuric acid mist. Emissions are based on a stack test performed in 1994 on a similar facility in Wisconsin.		
Limited Potential to Emit (tons/year)		
Emissions Generating Activity		
Pollutant	Anodizing Lines	TOTAL
PM	0.35	0.35
PM10	0.35	0.35
SO2	0.43	0.43
NOx	0.00	0.00
VOC	0.00	0.00
CO	0.00	0.00
total HAPs***	0.00	0.00
worst case single HAP***	0.00	0.00
Total emissions based on rated capacities at 8,760 hours/year.		
For the purposes of determining Title V applicability, PM10 (not PM) is the regulated pollutant in consideration		
The electrolyte holding tanks for each of the anodizing lines are controlled by a packed bed scrubber and are covered. The control efficiency of the packed bed scrubbers for each line is 34%.		