MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Kawneer Company, Inc.
751 International Drive
Franklin, Indiana 46131

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

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 081-11715-00037	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 13, 2001 Expiration Date: December 13, 2006

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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 and A.2 are 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 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary aluminum door and window manufacturing source source.

Authorized Individual:	George Marshall
Source Address:	751 International Drive, Franklin, Indiana 46131
Mailing Address:	P.O. Box 609 Franklin, Indiana 46131
Phone Number:	317-736-1802
SIC Code:	3354
County Location:	Johnson
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to operate the following emissions units and pollution control devices:

Extrusion - 0908/0918 Total Rating: 27,517,400 BTU/hr

(a) One (1) Granco Log Oven, firing natural gas, identified as P-3, exhausting to Stack 41, installed in 1994, rated at: 5.58 million British thermal units per hour.

(b) One (1) Belco Age Oven, firing natural gas, identified as P-18, exhausting to Stack 39, installed in 1974, rated at: 4.0 million British thermal units per hour.

(c) One (1) Belco Die Box, firing natural gas, identified as P-24, exhausting to Stack 43, installed in 1974, rated at: 0.5 million British thermal units per hour.

(d) One (1) Elhaus Log Oven, firing natural gas, identified as SP-3, exhausting to Stack 31, installed in 1995, rated at: 2.75 million British thermal units per hour.

(e) Two (2) Gerref Age Ovens, firing natural gas, identified as SP-17 and SP-18, exhausting to Stack 37, each installed in 1995, rated at: 3.5 million British thermal units per hour, each.

(f) Nine (9) Unit Heaters, firing natural gas, identified as point sources 20, 21, 27, 28, 32, 33, 34, 35, and 42, exhausting to Stacks 20, 21, 27, 28, 32, 33, 34, 35, and 42, installed in 1995, rated at: 1.35 million British thermal units per hour, total.

(g) Three (3) Unit Heaters, firing natural gas, identified as point sources 23, 24, and 25, exhausting to Stacks 23, 24, and 25, each installed in 1995, rated at: 0.3 million British thermal units per hour, total.

(h) One (1) Therm Deck Air Make Up, firing natural gas, identified as MUA-1, exhausting to Stack 30, installed in 1996, rated at: 5.83 million British thermal units per hour.

(i) One (1) Office Breakroom Heater, firing natural gas, identified as point source 29, exhausting to Stack 29, installed in 1995, rated at: 0.06 million British thermal units per hour.

(j) One (1) Scrap Shed Furnace, firing natural gas, identified as point source 26, exhausting to Stack 26, installed in 1998, rated at 0.15 million British thermal units per hour.

(k) One (1) Die Caustic Tank, identified as point source 69, exhausting through Stack 69, installed in 1995, capacity: 600 gallons of caustic soda.

Anodizing - 1208 Total Rating: 20,400,000 BTU/hr

(l) One (1) Tank #1 Cleaner, identified as A101-1, equipped with a Burner, firing natural gas, exhausting to Stack 46, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of cleaner. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it aerated. Therefore, there are no emissions from this tank.

(m) One (1) Tank #3 Caustic, identified as A103-1, equipped with a burner, firing natural gas, exhausting to Stack 48, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of caustic soda.

(n) One (1) Caustic Vent Tank #3, identified as point source 47, exhausting through Stack 47, installed in 1997, capacity: 8,000 gallons of caustic soda.

(o) One (1) Tank #5 Caustic, identified as A105-1, equipped with a burner, firing natural gas, exhausting to Stack 50, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of caustic soda.

(p) One (1) Caustic Vent Tank #5, identified as point source 49, exhausting through Stack 49, installed in 1997, capacity: 8,000 gallons of caustic soda.

(q) One (1) Tank #7 Desmutt, installed in 1974, capacity: 8,000 gallons. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(r) One (1) Anodizing Tank #9, identified as point source 51, exhausting through Stack 51, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(s) One (1) Anodizing Tank #12, identified as point source 52, installed in 1998, exhausting through Stack 52, capacity: 8,000 gallons of sulfuric acid.

(t) One (1) Anodizing Tank #13, identified as point source 57, installed in 1998, exhausting through Stack 57, capacity: 8,000 gallons of sulfuric acid.

(u) One (1) Anodizing Tank #15, identified as point source 58, exhausting through Stack 58, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(v) One (1) Anodizing Tank #17, identified as point source 59, exhausting through Stack 59, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(w) One (1) Tank #18 Color, installed in 1974, capacity: 8,000 gallons of a tin plating solution. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(x) One (1) Tank # 19 Color, installed in 1974, capacity: 8,000 gallons of a tin plating solution. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(y) One (1) Tank #21 Cold Seal, identified as A121-1, installed in 1974, equipped with a burner, firing natural gas, exhausting to Stack 60, installed in 1974, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and a nickel based additive.

(z) One (1) Tank #22 Cold Seal, identified as A123-1, installed in 1974, equipped with a burner, firing natural gas, exhausting to Stack 61, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and a nickel based additive.

(aa) One (1) Tank #23 DI Rinse, installed in 1974, capacity: 8,000 gallons of DI water. There are no known emissions of criteria pollutants from this tank.

(bb) One (1) Tank #24 Hot Seal, identified as A124-1, equipped with a burner, firing natural gas, exhausting to Stack 62, installed in 1998, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and detergent.

(cc) Seven (7) Rinse Tanks, identified as Tank 2,4,6,8,10,16,20, installed in 1974, capacity: 8,000 gallons of water, each. There are no known emissions of criteria pollutants from these tanks.

(dd) Two (2) Rinse Tanks, identified as Tank 11 and Tank 14, installed in 1998, capacity: 8,000 gallons of water, each. There are no known emissions of criteria pollutants from these tanks.

(ee) One (1) Unit Heater, firing natural gas, identified as point source 63, exhausting to Stack 63, installed in 1998, rated at: 0.15 million British thermal units per hour.

Small Parts - 1308 Total Rating: 5,832,000 BTU/hr

(ff) One (1) Therm Deck Air Make Up, firing natural gas, identified as MUA-10, exhausting to Stack 13, installed in 1996, rated at: 5.83 million British thermal units per hour.

Main Plant And Office Total Rating: 1,938,000 BTU/hr

(gg) One (1) Main Break Room Furnace, firing natural gas, identified as point source 11, exhausting to Stack 11, installed in 1996, rated at: 0.25 million British thermal units per hour.

(hh) One (1) Training Room Furnace, firing natural gas, identified as point source 8, exhausting to Stack 8, installed in 1996, rated at: 0.11 million British thermal units per hour.

(ii) One (1) Manufacturing Manager Office Furnace, firing natural gas, identified as point source 9, exhausting to Stack 9, installed in 1984, rated at: 0.075 million British thermal units per hour.

(jj) One (1) Weil Mclain Office Boiler, identified as Boiler 1, firing natural gas, exhausting to Stack 1, installed in 1996, rated at: 0.64 million British thermal units per hour.

(kk) One (1) Manufacturing Engineering Office Furnace, firing natural gas, identified as point source 10, exhausting to Stack 10, installed in 1984, rated at: 0.160 million British thermal units per hour.

(ll) Four (4) Infra Red Heaters Wastewater, firing natural gas, identified as point sources 53, 54, 55, and 56, exhausting to Stacks 53, 54, 55, and 56, each installed in 1996, rated at: 0.700 million British thermal units per hour, total.

Shipping & Material Handling - 5308 & 5508
Total Rating: 27,668, 000 BTU/hr

(mm) 4-Air Curtains, firing natural gas, identified as point sources MUA-2, MUA-6, MUA-7, and MUA 9, exhausting to Stacks 3, 4, 5, and 64, each installed in 1998, rated at: 9.5 million British thermal units per hour, total.

(nn) One (1) Harrison Air Makeup Unit, firing natural gas, identified as MUA-8, exhausting to Stack 2, installed in 1974, rated at: 4.8 million British thermal units per hour.

(oo) Two (2) West Side Air Makeup Units, firing natural gas, identified as point sources 66 and 67, exhausting to Stacks 66 and 67, each installed in 1998, rated at: 10.4 million British thermal units per hour.

(pp) One (1) Cambridge Air Makeup - Westside, firing natural gas, identified as point source 65, exhausting to Stack 65, installed in 1998, rated at: 3.0 million British thermal units per hour.

North Building **Total Rating: 200,000 BTU/hr**

(qq) One (1) Office Furnace, firing natural gas, identified as point source 70, exhausting to Stack 70, installed in 1990, rated at: 0.10 million British thermal units per hour.

(rr) One (1) Shop Furnace, firing natural gas, identified as point 71, exhausting to Stack 71, installed in 1998, rated at: 0.100 million British thermal units per hour.

Other Operations

(ss) One (1) Silk Screening Operation, identified as point source 12, exhausting to Stack 12, capacity: 0.055 door mid-panel parts per hour.

(tt) One (1) Sawing Operation, consisting of one (1) Elhaus Hot Saw, identified as point source 72, one (1) Elhaus Finish Saw, identified as SP-19, one (1) Wean Hot Saw, identified as P-9, one (1) Wean Finish Saw, identified as P-17, one (1) Small Parts - Auto Saw#1, identified as F-318, one (1) Small Parts - Auto Saw#2, identified as F-319, and one (1) Small Parts - Router Saw, identified as F-27, equipped with a cyclone for PM control, capacity: 7.71 pounds of aluminum per hour, total. The aluminum chips produced at this facility have a diameter greater than one-hundred (100) microns. Therefore, there are no emissions of any criteria pollutants from this source. The cyclone is used for material handling rather than air pollution control.

(uu) One (1) Buffing Operation, identified as F-294, equipped with a cyclone for PM control, exhausting to Stack 18, capacity: 1.48 pounds of aluminum dust per hour.

(vv) One (1) Parts Cleaner, identified as point source 14, exhausting to Stack 14, installed in 1995, capacity: 281 pounds of “Ripper” per year.

(ww) One (1) Safety-Kleen Parts Cleaner, identified as point source 74, installed in 1995, capacity: 281 pounds of Safety-Kleen per year.

(xx) One (1) Pour and Debridge operation, identified as point source 19, exhausting through two (2) Stacks, identified as 19, installed in 1978, capacity: 0.02 pounds of AZO purge per hour and 0.0426 pounds of MDI per year.

(yy) One (1) Anodizing Rack Repair-Welding, identified as point source 44, exhausting through Stack 44, capacity: 0.022 pounds of welding wire per hour.

(zz) One (1) Glass Bead Blast Machine, installed in 1974, capacity: 4.62 pounds per hour of aluminum. The sand blaster is self-contained where by, the air used for blasting is filtered, recycled and reused in the enclosed glove box. There are no known emissions from this facility.

(aaa) One (1) Extrusion Process, capacity: 12,720 pounds per hour of aluminum logs. This extrusion process consists of one (1) Wean united extrusion press, identified as P-1, installed in 1974, and one (1) Sutton extrusion press, identified as SP-1, installed in 1996. There are no emissions of any criteria pollutants from this facility.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

(e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

B.7 Permit Term [326 IAC 2-6.1-7]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications or amendments of this permit do not affect the expiration date.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit of all criteria pollutants is less than two hundred fifty (250) tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase potential to emit PM_{10}, SO_2, VOC, NO_X or CO to 100 tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

Any change or modification which may increase potential to emit to ten (10) tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.3 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to 326 IAC 2-6.1-6(d)(3):

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

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:

(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 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.

C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee 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 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within sixty (60) days after achieving maximum production rate, but no later than one hundred eighty (180) days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the

initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report

Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) A malfunction as described in 326 IAC 1-6-2; or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(e) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(f) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Extrusion - 0908/0918 Total Rating: 27,517,400 BTU/hr

(a) One (1) Granco Log Oven, firing natural gas, identified as P-3, exhausting to Stack 41, installed in 1994, rated at: 5.58 million British thermal units per hour.

(b) One (1) Belco Age Oven, firing natural gas, identified as P-18, exhausting to Stack 39, installed in 1974, rated at: 4.0 million British thermal units per hour.

(c) One (1) Belco Die Box, firing natural gas, identified as P-24, exhausting to Stack 43, installed in 1974, rated at: 0.5 million British thermal units per hour.

(d) One (1) Elhaus Log Oven, firing natural gas, identified as SP-3, exhausting to Stack 31, installed in 1995, rated at: 2.75 million British thermal units per hour.

(e) Two (2) Gerref Age Ovens, firing natural gas, identified as SP-17 and SP-18, exhausting to Stack 37, each installed in 1995, rated at: 3.5 million British thermal units per hour, each.

(f) Nine (9) Unit Heaters, firing natural gas, identified as point sources 20, 21, 27, 28, 32, 33, 34, 35, and 42, exhausting to Stacks 20, 21, 27, 28, 32, 33, 34, 35, and 42, installed in 1995, rated at: 1.35 million British thermal units per hour, total.

(g) Three (3) Unit Heaters, firing natural gas, identified as point sources 23, 24, and 25, exhausting to Stacks 23, 24, and 25, each installed in 1995, rated at: 0.3 million British thermal units per hour, total.

(h) One (1) Therm Deck Air Make Up, firing natural gas, identified as MUA-1, exhausting to Stack 30, installed in 1996, rated at: 5.83 million British thermal units per hour.

(i) One (1) Office Breakroom Heater, firing natural gas, identified as point source 29, exhausting to Stack 29, installed in 1995, rated at: 0.06 million British thermal units per hour.

(j) One (1) Scrap Shed Furnace, firing natural gas, identified as point source 26, exhausting to Stack 26, installed in 1998, rated at 0.15 million British thermal units per hour.

(k) One (1) Die Caustic Tank, identified as point source 69, exhausting through Stack 69, installed in 1995, capacity: 600 gallons of caustic soda.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2, the PM from the one (1) Die Caustic Tank, identified as point source 69 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements [326 IAC 2-1.1-11]

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Anodizing - 1208 Total Rating: 20,400,000 BTU/hr

(l) One (1) Tank #1 Cleaner, identified as A101-1, equipped with a Burner, firing natural gas, exhausting to Stack 46, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of cleaner. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(m) One (1) Tank #3 Caustic, identified as A103-1, equipped with a burner, firing natural gas, exhausting to Stack 48, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of caustic soda.

(n) One (1) Caustic Vent Tank #3, identified as point source 47, exhausting through Stack 47, installed in 1997, capacity: 8,000 gallons of caustic soda.

(o) One (1) Tank #5 Caustic, identified as A105-1, equipped with a burner, firing natural gas, exhausting to Stack 50, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of caustic soda.

(p) One (1) Caustic Vent Tank #5, identified as point source 49, exhausting through Stack 49, installed in 1997, capacity: 8,000 gallons of caustic soda.

(q) One (1) Tank #7 Desmutt, installed in 1974, capacity: 8,000 gallons. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(r) One (1) Anodizing Tank #9, identified as point source 51, exhausting through Stack 51, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(s) One (1) Anodizing Tank #12, identified as point source 52, installed in 1998, exhausting through Stack 52, capacity: 8,000 gallons of sulfuric acid.

(t) One (1) Anodizing Tank #13, identified as point source 57, installed in 1998, exhausting through Stack 57, capacity: 8,000 gallons of sulfuric acid.

(u) One (1) Anodizing Tank #15, identified as point source 58, exhausting through Stack 58, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(v) One (1) Anodizing Tank #17, identified as point source 59, exhausting through Stack 59, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(w) One (1) Tank #18 Color, installed in 1974, capacity: 8,000 gallons of a tin plating solution. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(x) One (1) Tank # 19 Color, installed in 1974, capacity: 8,000 gallons of a tin plating solution. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(y) One (1) Tank #21 Cold Seal, identified as A121-1, installed in 1974, equipped with a burner, firing natural gas, exhausting to Stack 60, installed in 1974, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and nickel based additive.

(z) One (1) Tank #22 Cold Seal, identified as A123-1, installed in 1974, September 25, 2001equipped with a burner, firing natural gas, exhausting to Stack 61, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and a nickel based additive.

(aa) One (1) Tank #23 DI Rinse, installed in 1974, capacity: 8,000 gallons of DI water. There are no known emissions of criteria pollutants from this tank.

(bb) One (1) Tank #24 Hot Seal, identified as A124-1, equipped with a burner, firing natural gas, exhausting to Stack 62, installed in 1998, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and detergent.

(cc) Seven (7) Rinse Tanks, identified as Tank 2,4,6,8,10,16,20, installed in 1974, capacity: 8,000 gallons of water, each. There are no known emissions of criteria pollutants from these tanks.

(dd) Two (2) Rinse Tanks, identified as Tank 11 and Tank 14, installed in 1998, capacity: 8,000 gallons of water, each. There are no known emissions of criteria pollutants from these tanks.

(ee) One (1) Unit Heater, firing natural gas, identified as point source 63, exhausting to Stack 63, installed in 1998, rated at: 0.15 million British thermal units per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2, the PM from the one (1) Tank #3 Caustic, the one (1) Tank #5 Caustic, the one (1) Anodizing Tank #9, the one (1) Anodizing Tank #12, the one (1) Anodizing Tank #13, the one (1) Anodizing Tank #15, the one (1) Anodizing Tank #17, the one (1) Tank #21 Cold Seal, the one (1) Tank #22 Cold Seal, the one (1) Tank #23 DI Rinse, and the one (1) Tank #24 Hot Seal, identified as point source 69 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements [326 IAC 2-1.1-11]

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Small Parts - 1308 Total Rating: 5,832,000 BTU/hr

(ff) One (1) Therm Deck Air Make Up, firing natural gas, identified as MUA-10, exhausting to Stack 13, installed in 1996, rated at: 5.83 million British thermal units per hour.

Main Plant And Office Total Rating: 1,938,000 BTU/hr

(gg) One (1) Main Break Room Furnace, firing natural gas, identified as point source 11, exhausting to Stack 11, installed in 1996, rated at: 0.25 million British thermal units per hour.

(hh) One (1) Training Room Furnace, firing natural gas, identified as point source 8, exhausting to Stack 8, installed in 1996, rated at: 0.11 million British thermal units per hour.

(ii) One (1) Manufacturing Manager Office Furnace, firing natural gas, identified as point source 9, exhausting to Stack 9, installed in 1984, rated at: 0.075 million British thermal units per hour.

(jj) One (1) Weil Mclain Office Boiler, identified as Boiler 1, firing natural gas, exhausting to Stack 1, installed in 1996, rated at: 0.64 million British thermal units per hour.

(kk) One (1) Manufacturing Engineering Office Furnace, firing natural gas, identified as point source 10, exhausting to Stack 10, installed in 1984, rated at: 0.160 million British thermal units per hour.

(ll) Four (4) Infra Red Heaters Wastewater, firing natural gas, identified as point sources 53, 54, 55, and 56, exhausting to Stacks 53, 54, 55, and 56, each installed in 1996, rated at: 0.700 million British thermal units per hour, total.

Shipping & Material Handling - 5308 & 5508
Total Rating: 27,668, 000 BTU/hr

(mm) 4-Air Curtains, firing natural gas, identified as point sources MUA-2, MUA-6, MUA-7, and MUA 9, exhausting to Stacks 3, 4, 5, and 64, each installed in 1998, rated at: 9.5 million British thermal units per hour, total.

(nn) One (1) Harrison Air Makeup Unit, firing natural gas, identified as MUA-8, exhausting to Stack 2, installed in 1974, rated at: 4.8 million British thermal units per hour.

(oo) Two (2) West Side Air Makeup Units, firing natural gas, identified as point sources 66 and 67, exhausting to Stacks 66 and 67, each installed in 1998, rated at: 10.4 million British thermal units per hour.

(pp) One (1) Cambridge Air Makeup - Westside, firing natural gas, identified as point source 65, exhausting to Stack 65, installed in 1998, rated at: 3.0 million British thermal units per hour.

North Building Total Rating: 200,000 BTU/hr

(qq) One (1) Office Furnace, firing natural gas, identified as point source 70, exhausting to Stack 70, installed in 1990, rated at: 0.10 million British thermal units per hour.

(rr) One (1) Shop Furnace, firing natural gas, identified as point 71, exhausting to Stack 71, installed in 1998, rated at: 0.100 million British thermal units per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a), the allowable PM emission rate from the one (1) Weil Mclain Office Boiler shall not exceed 0.6 pounds per million British thermal units heat input.

Compliance Determination Requirements [326 IAC 2-1.1-11]

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific Compliance Determination Requirements applicable to these emission units.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Other Operations

(ss) One (1) Silk Screening Operation, identified as point source 12, exhausting to Stack 12, capacity: 0.055 door mid-panel parts per hour.

(tt) One (1) Sawing Operation, consisting of one (1) Elhaus Hot Saw, identified as point source 72, one (1) Elhaus Finish Saw, identified as SP-19, one (1) Wean Hot Saw, identified as P-9, one (1) Wean Finish Saw, identified as P-17, one (1) Small Parts - Auto Saw#1, identified as F-318, one (1) Small Parts - Auto Saw#2, identified as F-319, and one (1) Small Parts - Router Saw, identified as F-27, equipped with a cyclone for PM control, capacity: 7.71 pounds of aluminum per hour, total. The aluminum chips produced at this facility are greater than one-hundred (100) microns. Therefore, there are no emissions of any criteria pollutants from this source. The cyclone is used primarily for material handling rather than air pollution control.

(uu) One (1) Buffing Operation, identified as F-294, equipped with a cyclone for PM control, exhausting to Stack 18, capacity: 1.48 pounds of aluminum dust per hour.

(vv) One (1) parts cleaner, identified as point source 14, exhausting to Stack 14, installed in 1995, capacity: 281 pounds of “Ripper” per year.

(ww) One (1) Safety-Kleen parts cleaner, identified as point source 74, installed in 1995, capacity: 281 pounds of Safety-Kleen per year.

(xx) One (1) Pour and Debridge operation, identified as point source 19, exhausting through two (2) Stacks, identified as 19, installed in 1978, capacity: 0.02 pounds of AZO purge per hour and 0.0426 pounds of MDI per year.

(yy) One (1) Anodizing Rack Repair-Welding, identified as point source 44, exhausting through Stack 44, capacity: 0.022 pounds of welding wire per hour.

(zz) One (1) glass bead blast machine, installed in 1974, capacity: 4.62 pounds per hour of aluminum. The sand blaster is self-contained where by, the air used for blasting is filtered, recycled and reused in the enclosed glove box. There are no known emissions from this facility.

(aaa) One (1) Extrusion Process, capacity: 12,720 pounds per hour of aluminum logs. This extrusion process consists of one (1) Wean united extrusion press, identified as P-1, installed in 1974, and one (1) Sutton extrusion press, identified as SP-1, installed in 1996. There are no emissions of any criteria pollutants from this facility.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2, the PM from the one (1) Buffing Operation, identified as F-294, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

The one (1) Parts Cleaner, identified as point source 14 and the one (1) Safety-Kleen Parts Cleaner, identified as point source 74, are subject to the provisions of 326 IAC 8-3-2 (Organic solvent degreasing operations: cold cleaner operations). Pursuant to this rule, the owner or operator of the one (1) Parts Cleaner and the one (1) Safety-Kleen Parts Cleaner 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 operating 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.

D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of the cold cleaner degreaser (one (1) parts cleaner, identified as point source 14, one (1) Safety-Kleen parts cleaner, identified as point source 74) 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 (38EC) (one hundred degrees Fahrenheit (100EF));

(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 (38EC) (one hundred degrees Fahrenheit (100EF)), 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 (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

(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 of 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.

D.4.4 Volatile Organic Compounds [326 IAC 8-2-9]

Any change or modification which would increase the actual VOC emissions to fifteen (15) pounds per day or more from the one (1) Silk Screening Operation, identified as point source 12 shall obtain prior approval from IDEM, OAQ.

D.4.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these emissions unit and its control device.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.4.6 Particulate Matter (PM)

The cyclone for PM control shall be in operation at all times when the one (1) Buffing Operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.7 Record Keeping Requirements

(a) To document compliance with Condition D.4.4, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be

taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.4.4.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup solvent usage for each day;

(3) The total VOC usage for each day; and

(4) The weight of VOCs emitted for each compliance period.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Kawneer Company, Inc.**
Address:	**751 International Drive**
City:	**Franklin, Indiana 46131**
Phone #:	**317-736-1817**
MSOP #:	**081-11715-00037**

I hereby certify that Kawneer Company, Inc. is **9** still in operation.
9 no longer in operation.

I hereby certify that Kawneer Company, Inc. is **9** in compliance with the requirements of MSOP **081-11715-00037**
9 not in compliance with the requirements of MSOP **081-11715-00037**

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name:	**Kawneer Company, Inc.**
Source Location:	**751 International Drive, Franklin, Indiana 46131**
County:	**Johnson**
SIC Code:	**3354**
Operation Permit No.:	**MSOP 081-11715-00037**
Permit Reviewer:	**Craig J. Friederich**

The Office of Air Quality (OAQ) has reviewed an application from Kawneer Company, Inc relating to the construction and operation of an aluminum door and window manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Extrusion - 0908/0918

(a) One (1) Belco Age Oven, firing natural gas, identified as P-18, exhausting to Stack 39, installed in 1974, rated at: 4.0 million British thermal units per hour.

(b) One (1) Belco Die Box, firing natural gas, identified as P-24, exhausting to Stack 43, installed in 1974, rated at: 0.5 million British thermal units per hour.

(c) One (1) Elhaus Log Oven, firing natural gas, identified as SP-3, exhausting to Stack 31, installed in 1995, rated at: 2.75 million British thermal units per hour.

(d) Two (2) Gerref Age Ovens, firing natural gas, identified as SP-17 and SP-18, exhausting to Stack 37, each installed in 1995, rated at: 3.5 million British thermal units per hour, each.

(e) Nine (9) Unit Heaters, firing natural gas, identified as point sources 20, 21, 27, 28, 32, 33, 34, 35, and 42, exhausting to Stacks 20, 21, 27, 28, 32, 33, 34, 35, and 42, installed in 1995, rated at: 1.35 million British thermal units per hour, total.

(f) Three (3) Unit Heaters, firing natural gas, identified as point sources 23, 24, and 25, exhausting to Stacks 23, 24, and 25, each installed in 1995, rated at: 0.3 million British thermal units per hour, total.

(g) One (1) Die Caustic Tank, identified as point source 69, exhausting through Stack 69, installed in 1995, capacity: 600 gallons of caustic soda.

Anodizing - 1208

(h) One (1) Tank #1 Cleaner, identified as A101-1, equipped with a Burner, firing natural gas, exhausting to Stack 46, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of cleaner. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it aerated. Therefore, there are no emissions from this tank.

(i) One (1) Tank #3 Caustic, identified as A103-1, equipped with a burner, firing natural gas, exhausting to Stack 48, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of caustic soda.

(j) One (1) Tank #5 Caustic, identified as A105-1, equipped with a burner, firing natural gas, exhausting to Stack 50, installed in 1974, rated at: 2.75 million British thermal units per hour, capacity: 8,000 gallons of caustic soda.

(k) One (1) Tank #7 Desmutt, installed in 1974, capacity: 8,000 gallons. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(l) One (1) Tank #18 Color, installed in 1974, capacity: 8,000 gallons of a tin plating solution. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(m) One (1) Tank # 19 Color, installed in 1974, capacity: 8,000 gallons of a tin plating solution. This tank does not contain any substances which would result in emissions of Volatile Organic Compounds, nor is it heated or aerated. Therefore, there are no emissions from this tank.

(n) One (1) Tank #21 Cold Seal, identified as A121-1, installed in 1974, equipped with a burner, firing natural gas, exhausting to Stack 60, installed in 1974, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and a nickel based additive.

(o) One (1) Tank #22 Cold Seal, identified as A123-1, installed in 1974, equipped with a burner, firing natural gas, exhausting to Stack 61, installed in 1974, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and a nickel based additive.

(p) One (1) Tank #23 DI Rinse, installed in 1974, capacity: 8,000 gallons of DI water. There are no known emissions of criteria pollutants from this tank.

(q) Seven (7) Rinse Tanks, identified as Tank 2,4,6,8,10,16,20, installed in 1974, capacity: 8,000 gallons of water, each. There are no known emissions of criteria pollutants from these tanks.

Total for all Combustion: 83,555,400 BTU/hr

Other Operations

(r) One (1) Sawing Operation, consisting of one (1) Elhaus Hot Saw, identified as point source 72, one (1) Elhaus Finish Saw, identified as SP-19, one (1) Wean Hot Saw, identified as P-9, one (1) Wean Finish Saw, identified as P-17, one (1) Small Parts - Auto Saw#1, identified as F-318, one (1) Small Parts - Auto Saw#2, identified as F-319, and one (1) Small Parts - Router Saw, identified as F-27, equipped with a cyclone for PM control, capacity: 7.71 pounds of aluminum per hour, total. The aluminum chips produced at this facility have

diameters greater than one-hundred (100) microns. Therefore, there are no emissions of any criteria pollutants from this source. The cyclone is used for material handling rather than air pollution control.

(s) One (1) Buffing Operation, identified as F-294, equipped with a cyclone for PM control, exhausting to Stack 18, capacity: 1.48 pounds of aluminum dust per hour.

(t) One (1) Glass Bead Blast Machine, installed in 1974, capacity: 4.62 pounds per hour of aluminum. The sand blaster is self-contained where by, the air used for blasting is filtered, recycled and reused in the enclosed glove box. There are no known emissions from this facility.

(u) One (1) Extrusion Process, capacity: 12,720 pounds per hour of aluminum logs. This extrusion process consists of one (1) Wean united extrusion press, identified as P-1, installed in 1974 and one (1) Sutton extrusion press, identified as SP-1, installed in 1996. There are no emissions of any criteria pollutants from this facility.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

Extrusion - 0908/0918 Total Rating 27,517,400 BTU/hr

(v) One (1) Granco Log Oven, firing natural gas, identified as P-3, exhausting to Stack 41, installed in 1994, rated at: 5.58 million British thermal units per hour.

(w) One (1) Therm Deck Air Make Up, firing natural gas, identified as MUA-1, exhausting to Stack 30, installed in 1996, rated at: 5.83 million British thermal units per hour. (Exempt level)

(x) One (1) Office Breakroom Heater, firing natural gas, identified as point source 29, exhausting to Stack 29, installed in 1995, rated at: 0.06 million British thermal units per hour. (Exempt level)

(y) One (1) Scrap Shed Furnace, firing natural gas, identified as point source 26, exhausting to Stack 26, installed in 1998, rated at 0.15 million British thermal units per hour.

Anodizing - 1208

(z) One (1) Caustic Vent Tank #3, identified as point source 47, exhausting through Stack 47, installed in 1997, capacity: 8,000 gallons of caustic soda.

(aa) One (1) Caustic Vent Tank #5, identified as point source 49, exhausting through Stack 49, installed in 1997, capacity: 8,000 gallons of caustic soda.

(bb) One (1) Anodizing Tank #9, identified as point source 51, exhausting through Stack 51, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(cc) One (1) Anodizing Tank #12, identified as point source 52, installed in 1998, exhausting through Stack 52, capacity: 8,000 gallons of sulfuric acid.

(dd) One (1) Anodizing Tank #13, identified as point source 57, installed in 1998, exhausting through Stack 57, capacity: 8,000 gallons of sulfuric acid.

(ee) One (1) Anodizing Tank #15, identified as point source 58, exhausting through Stack 58, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(ff) One (1) Anodizing Tank #17, identified as point source 59, exhausting through Stack 59, installed in 1997, capacity: 8,000 gallons of sulfuric acid.

(gg) One (1) Tank #24 Hot Seal, identified as A124-1, equipped with a burner, firing natural gas, exhausting to Stack 62, installed in 1998, rated at: 4.0 million British thermal units per hour, capacity: 8,000 gallons of DI water and detergent.

(hh) One (1) Unit Heater, firing natural gas, identified as point source 63, exhausting to Stack 63, installed in 1998, rated at: 0.15 million British thermal units per hour.

(ii) Two (2) Rinse Tanks, identified as Tank 11 and Tank 14, installed in 1998, capacity: 8,000 gallons of water, each. There are no known emissions of criteria pollutants from these tanks.

Small Parts - 1308 Total Rating 5,832,000 BTU/hr

(jj) One (1) Therm Deck Air Make Up, firing natural gas, identified as MUA-10, exhausting to Stack 13, installed in 1996, rated at: 5.83 million British thermal units per hour. (Exempt level)

Main Plant And Office

(kk) One (1) Main Break Room Furnace, firing natural gas, identified as point source 11, exhausting to Stack 11, installed in 1996, rated at: 0.25 million British thermal units per hour.

(ll) One (1) Training Room Furnace, firing natural gas, identified as point source 8, exhausting to Stack 8, installed in 1996, rated at: 0.11 million British thermal units per hour.

(mm) One (1) Manufacturing Manager Office Furnace, firing natural gas, identified as point source 9, exhausting to Stack 9, installed in 1984, rated at: 0.075 million British thermal units per hour.

(nn) One (1) Weil Mclain Office Boiler, identified as Boiler 1, firing natural gas, exhausting to Stack 1, installed in 1996, rated at: 0.64 million British thermal units per hour.

(oo) One (1) Manufacturing Engineering Office Furnace, firing natural gas, identified as point source 10, exhausting to Stack 10, installed in 1984, rated at: 0.160 million British thermal units per hour.

(pp) Four (4) Infra Red Heaters Wastewater, firing natural gas, identified as point sources 53, 54, 55, and 56, exhausting to Stacks 53, 54, 55, and 56, each installed in 1996, rated at: 0.700 million British thermal units per hour, total.

Shipping & Material Handling - 5308 & 5508

(qq) 4-Air Curtains, firing natural gas, identified as point sources MUA-2, MUA-6, MUA-7, and MUA 9, exhausting to Stacks 3, 4, 5, and 64, each installed in 1998, rated at: 9.5 million British thermal units per hour, total.

(rr) One (1) Harrison Air Makeup Unit, firing natural gas, identified as MUA-8, exhausting to Stack 2, installed in 1974, rated at: 4.8 million British thermal units per hour.

(ss) Two (2) West Side Air Makeup Units, firing natural gas, identified as point sources 66 and 67, exhausting to Stacks 66 and 67, each installed in 1998, rated at: 10.4 million British thermal units per hour.

(tt) One (1) Cambridge Air Makeup - Westside, firing natural gas, identified as point source 65, exhausting to Stack 65, installed in 1998, rated at: 3.0 million British thermal units per hour.

North Building

(uu) One (1) Office Furnace, firing natural gas, identified as point source 70, exhausting to Stack 70, installed in 1990, rated at: 0.10 million British thermal units per hour.

(vv) One (1) Shop Furnace, firing natural gas, identified as point 71, exhausting to Stack 71, installed in 1998, rated at: 0.100 million British thermal units per hour.

Other Operations

(ww) One (1) Silk Screening Operation, identified as point source 12, exhausting to Stack 12, capacity: 0.055 door mid-panel parts per hour.

(xx) One (1) Parts Cleaner, identified as point source 14, exhausting to Stack 14, installed in 1995, capacity: 281 pounds of “Ripper” per year.

(yy) One (1) Safety-Kleen Parts Cleaner, identified as point source 74, installed in 1995, capacity: 281 pounds of Safety-Kleen per year.

(zz) One (1) Pour and Debridge operation, identified as point source 19, exhausting through two (2) Stacks, identified as 19, installed in 1978, capacity: 0.02 pounds of AZO purge per hour and 0.0426 pounds of MDI per year.

(aaa) One (1) Anodizing Rack Repair-Welding, identified as point source 44, exhausting through Stack 44, capacity: 0.022 pounds of welding wire per hour.

New Emission Units and Pollution Control Equipment

There are no new facilities proposed at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) OP41-07-9-0016, issued July 12, 1974;

(b) Registration issued January 17, 1980;

(c) R081-4769-00037, issued on January 6, 1995; and

(b) R081-5158-00037, issued on May 15, 1996

All conditions from previous approvals were incorporated into this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
1	Weil McLain Office Boiler	34	.583	189.6	442
2	Harrison Air Makeup Unit	N/A	N/A	875.6	100
3	Air Curtain	N/A	N/A	433.5	100
4	Air Curtain	N/A	N/A	433.5	100
5	Air Curtain	N/A	N/A	433.5	100
8	Training Room Furnace	34	.417	29.6	345
9	Mfg. Managers Offices Furnace	34	.5	20.3	340
10	Mfg. Eng. Offices Furnace	34	.416	42.7	345
11	Main Break Room Furnace	34	.833	66.2	345
12	Xylene Fume Hood	12	1.5	4,950	68
13	Therm Deck Air Make Up Unit	N/A	N/A	1,063.8	100
14	Ripper Fume Hood	12	1.5	1,650	68
15	Auto Saw #1 Small Parts	N/A	N/A	N/A	68
16	Auto Saw #2 Small Parts	N/A	N/A	N/A	68
17	Router Saw #1 Small Parts	N/A	N/A	N/A	68
18	Buffing Dust Collector	16	1.166	3,500	68
19	Pour & Debridge Operation - 2 Stacks	34 34	.750 .250	4,200 1,200	68 68
20	Unit Heater	34	.5	40.0	345
21	Unit Heater	34	.5	40.0	345
22	Extrusion Die Repair - No Vent	N/A	N/A	N/A	N/A
23	Unit Heater	24	.5	26.8	340
24	Unit Heater	24	.5	26.8	340
25	Unit Heater	24	.5	26.8	340
26	Scrap Shed Furnace	34	.5	39.8	340
27	Unit Heater	34	.5	40.0	345
28	Unit Heater	34	.5	40.0	345

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
29	Extrusion Office Furnace	34	.58	18.4	442
30	Extrusion Air Makeup	N/A	N/A	1,063.8	100
31	Elhaus Log Oven	33	1	686.4	307
32	Unit Heater	34	.5	40.0	345
33	Unit Heater	34	.5	40.0	345
34	Unit Heater	34	.5	40.0	345
35	Unit Heater	34	.5	40.0	345
36	Elhaus Finish Saw	N/A	N/A	N/A	68
37	Elhaus Age Oven #1 - "Y" same Exhaust Stack as Age Oven #2	37	1.5	991	307
38	Elhaus Age Oven #2 - "Y" same Exhaust Stack as Age Oven #1	37	1.5	991	307
39	Belco Age Oven	38	.583	1,021.7	324
40	Finish Saw - Wean Extrusion Press	N/A	N/A	N/A	68
41	Granco Log Oven	35	1.08	1,879.1	574
42	Unit Heater	34	.5	40.0	345
43	Belco Die Box	35	.5	147.5	441
44	Anodizing Rack Repair - Welding	34	1.	6,500	68
45	Cathode and Rack Repair Welding - No Vent	N/A	N/A	N/A	68
46	Cleaner Tank #1 - Burner	36	.833	1,010	667
47	Caustic Vent Tank - Tank #3	31	3.33	24,096	120
48	Caustic Tank #3 - Burner	36	.833	1,154.3	828
49	Caustic Vent Tank - Tank #5	31	3.33	24,096	120
50	Caustic Tank #5 - Burner	36	.833	1,257.4	943
51	Acid Vent Tank - Tank #9	31	3.166	22,000	68
52	Acid Vent Tank - Tank #12	31	3.166	22,000	68
53	Unit Heater	34	.5	40.0	345
54	Unit Heater	34	.5	40.0	345
55	Unit Heater	34	.5	40.0	345
56	Unit Heater	34	.5	40.0	345

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
57	Acid Vent Tank - Tank #13	31	3.166	22,000	68
58	Acid Vent Tank - Tank #15	31	3.166	22,000	68
59	Acid Vent Tank - Tank #17	31	3.166	22,000	68
60	Cold Seal Tank #21-Burner	36	1	1,170.2	438
61	Cold Seal Tank #22 - Burner	36	1	1,288.8	529
62	Hot Seal Tank #24 - Burner	36	1	1,039.9	338
63	Unit Heater	36	.5	39.8	345
64	Air Curtain	N/A	N/A	433.5	100
65	Cambridge Air Make Up Unit	N/A	N/A	547.4	100
66	West Side Air Make Up Unit	N/A	N/A	945.6	100
67	West Side Air Make Up Unit	N/A	N/A	945.6	100
68	Wean Hot Saw	N/A	N/A	N/A	68
69	Die Caustic Tank Vent	29	1.5	10,000	120
70	N. Building - Office Furnace	22	.5	26.8	345
71	N. Building - WH Furnace	22	.5	26.8	345
72	Elhaus Hot Saw	N/A	N/A	N/A	68
73	Main Chip Collector	8	4.5	27,000	68
74	Safety Kleen Parts Washer	N/A	N/A	N/A	68

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Total potential NO_x emissions from all CWOP/OWOP facilities constructed in 1998 exceeds ten (10) tons per year. Therefore, a Referral to Enforcement is necessary.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

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 December 27, 1999, with additional information received on April 30, 2001, June 25, 2001 and August 3, 2001.

Emission Calculations

See Appendix A (pages 1 through 9 of 9) of this document for detailed emissions calculations.

The source estimates that evaporative losses of AZO purge used at the Pour and Debridge operation is 0.048 tons per year of VOC.

At this Pour and Debridge operation a very small amount of MDI is emitted. Based on "MPI/ Polymetric MDI Emissions Reporting Guidelines for the Polyurethane Industry" (1999, pages 5-15 through 5-17), the emission rate is 0.04261 pounds per year, or 0.00002 tons per year.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	**Potential To Emit** (tons/year)
PM	7.55
PM_{10}	9.63
SO_2	0.220
VOC	2.26
CO	30.7
NO_X	36.6

HAPs	**Potential To Emit** (tons/year)
Benzene	0.0008
Dichlorobenzene	0.0004
Formaldehyde	0.028
Hexane	0.660

HAPs	Potential To Emit (tons/year)
Toluene	0.001
Lead	0.0002
Cadmium	0.0004
Chromium	0.0005
Manganese	0.0002
Nickel	0.0008
MDI	0.00002
Xylene	0.007
TOTAL	0.699

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of NO_X is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Johnson County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Johnson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursu-

ant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Johnson County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	**Emissions** (ton/yr)
PM	1.11
PM_{10}	3.20
SO_2	0.220
VOC	2.26
CO	30.7
NO_X	36.6

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) These emissions were based on the Minor Source Operating Permit application and other information submitted by the source.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source based on the emissions summarized in this permit, MSOP 081-11715, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than one hundred (100) tons per year,

(b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and

(c) any combination of HAPS is less than twenty-five (25) tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

(a) The one (1) Weil Mclain Office Boiler, identified as Boiler 1, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40, Subpart Dc, because the capacity is less that ten (10) million British thermal units per hour.

(b) The one (1) parts cleaner, identified as point source 14, and the one (1) Safety-Kleen parts cleaner, identified as point source 74, are not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.460), Subpart T, because neither uses any halogenated solvents.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Johnson County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year, therefore, 326 IAC 2-6 does not apply.

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:

(a) Opacity shall not exceed an average of forty percent (40%) 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 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.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) Weil Mclain Office Boiler, identified as boiler 1, constructed in 1996, rated at 0.64 million British thermal units per hour, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

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.

Since this is the only boiler located at this source, the total heat input capacity is 0.64 million British thermal units per hour.

$Pt = 1.09/(0.64)^{0.26} = 1.22$lb/mmBtu heat input

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units. Therefore, the one (1) boiler is limited to emissions of 0.6 pound per million British thermal units.

Based on Appendix A, the potential PM emission rate for the boiler is:

0.021 ton/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.005lb/hr
(0.005 lb/hr / 0.64 mmBtu/hr) = 0.007lb PM per mmBtu

Therefore, the one (1) Weil Mclain boiler, identified as Boiler 1, constructed in 1996 will comply with this rule.

326 IAC 6-3-2 (Process Operations)

(a) The particulate matter (PM) from the one (1) Die Caustic Tank, identified as point source 69, the one (1) Tank #3 Caustic, the one (1) Tank #5 Caustic, the one (1) Anodizing Tank #9, the one (1) Anodizing Tank #12, the one (1) Anodizing Tank #13, the one (1) Anodizing Tank #15, the one (1) Anodizing Tank #17, the one (1) Tank #21 Cold Seal, the one (1) Tank #22 Cold Seal, the one (1) Tank #23 DI Rinse, and the one (1) Tank #24 Hot Seal shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

or

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

(b) The particulate matter (PM) from the one (1) Buffing Operation, identified as F-294, shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The cyclone shall be in operation at all times the one (1) Buffing Operation is in operation, in order to comply with this limit.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) are not applicable to the silk-screening operation because the potential to emit VOC is less than fifteen (15) pounds per day.

326 IAC 8-3-2 (Cold Cleaner Operations)

The one (1) Parts Cleaner, identified as point source 14 and the one (1) Safety-Kleen Parts Cleaner, identified as point source 74, are subject to the provisions of 326 IAC 8-3-2 (Organic solvent degreasing operations: cold cleaner operations) because they were constructed after the rule applicability date of January 1, 1980. The owner or operator of the cold cleaning facility 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 operating 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 (Organic Solvent Degreasing Operations)

The one (1) Parts Cleaner, identified as point source 14 and the one (1) Safety-Kleen Parts Cleaner, identified as point source 74, are subject to the provisions of 326 IAC 8-3-5 (Organic solvent degreasing operations: cold cleaner degreaser operation and control) because they do not have a remote solvent reservoir. Pursuant to 326 IAC 8-3-5, the owner or operator of a cold cleaner degreaser operation shall:

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser shall ensure that the following 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 (38EC) (one hundred degrees Fahrenheit (100EF));

(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 (38EC) (one hundred degrees

Fahrenheit (100EF)), 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 (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):

(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 of 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.

Conclusion

The operation of this aluminum door and window manufacturing source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 081-11715-00037.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Kawneer Company
Address City IN Zip: 751 International Drive, Franklin, IN
MSOP: 081-11715
Plt ID: 081-00037
Reviewer: Craig J. Friederich
Date: December 27, 1999

Material	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Silk Screening (Point Source 12)																
Xylene	7.23	100.00%	0.0%	100.0%	0.0%	0.00%	0.00390	0.055	7.23	7.23	0.00	0.04	0.007	0.00	n/a	100%
								PM	Control Efficiency	0.00%						
State Potential Emissions			**Add worst case coating to all solvents**						**Uncontrolled**		**0.00**	**0.04**	**0.007**	**0.00**		
									Controlled		**0.00**	**0.04**	**0.007**	**0.00**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Kawneer Company
Address City IN Zip: 751 International Drive, Franklin, IN
MSOP: 081-11715
Plt ID: 081-00037
Reviewer: Craig J. Friederich
Date: December 27, 1999

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Xylene Emissions (tons/yr)
Silk Screening (Point Source 12)	7.23	0.00390	0.055	100.00%	0.007
				Individual Total	**0.007**
METHODOLOGY				**Overall Total**	**0.007**

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
PM Potential Emissions

Company Name: Kawneer Company
Address City IN Zip: 751 International Drive, Franklin, IN
MSOP: 081-11715
Plt ID: 081-00037
Reviewer: Craig J. Friederich
Date: December 27, 1999

Material	Emission Rate (lb/hr)	Emission Rate (tons/yr)
Sulfuric Acid (PM)		
Anodizing tank #9	0.010	0.0438
Anodizing Tank #12	0.010	0.0438
Anodizing Tank #13	0.010	0.0438
Anodizing Tank #15	0.010	0.0438
Anodizing Tank #17	0.010	0.0438
Cold Seal Tank #21	0.010	0.0438
Cold Seal Tank #22	0.010	0.0438
DI Rinse Tank #23	0.010	0.0438
Hot Seal Tank #24	0.010	0.0438
Total	0.090	0.394

Material	Emission Rate (lb/hr)	Emission Rate (tons/yr)
Caustic Soda (PM)		
Caustic Tank #3	0.01	0.0438
Caustic Tank #5	0.01	0.0438
Die Caustic Tank	0.01	0.0438
Total	0.03	0.1314

Methodology

The emission rate is based on Stack testing done at the source dated 2/16/95

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

All combustion Equipment

Company Name: Kawneer Company
Address City IN Zip: 751 International Drive, Franklin, IN
MSOP: 081-11715
Plt ID: 081-00037
Reviewer: Craig J. Friederich
Date: December 27, 1999

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
83.71	733.26

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.697	2.786	0.220	36.663	2.016	30.797

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
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 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: **Kawneer Company, Inc.**
Address City IN Zip: **751 International Drive, Franklin, Indiana 46131**
Part 70: **081-11715**
Plt ID: **081-00037**
Reviewer: **Craig J. Friederich**
Date: **December 27, 1999**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	7.699E-04	4.400E-04	2.750E-02	6.599E-01	1.247E-03

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.833E-04	4.033E-04	5.133E-04	1.393E-04	7.699E-04

Methodology is the same as page 4.

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

Appendix A: Emissions Calculations
VOC Potential Emissions

Company Name: **Kawneer Company**
Address City IN Zip: **751 International Drive, Franklin, IN**
MSOP: **081-11715**
Plt ID: **081-00037**
Reviewer: **Craig J. Friederich**
Date: **December 27, 1999**

Material	Maximum Rate (units/hr)	Emission Factor (lb/units)	Emission Rate (lb/hr)	Emission Rate (tons/yr)
Degreaser				
Ripper	60	0.125	0.03	0.12045

Material	Maximum Rate (units/hr)	Emission Factor (lb/units)	Emission Rate (lb/hr)	Emission Rate (tons/yr)
Degreaser				
Safety Kleen	60	0.125	0.03	0.12045

Methodology

VOC Emission Rate (lbs/hr)=Maximum Rate (units/hr) * Emission Factor (lb/units)
Recycled By Solvent System(tons/yr)=Emission Rate (lbs/hr) * 8760 hours per year / 2000 pounds per ton
Maximum Potential Emissions(tons/yr)=Recycled By Solvent System (tons/yr) x (1-Percent Solvent Recycled)
*Note: Estimated Solvent Loss Rate From Inventory

Appendix A: Welding and Thermal Cutting

Company Name: Kawneer Company
Address City IN Zip: 751 International Drive, Franklin, IN
MSOP: 081-11715
Plt ID: 081-00037
Reviewer: Craig J. Friederich
Date: December 27, 1999

PROCESS	Number of Stations	Max. electrode consumption per station		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
WELDING		(lbs/hr)		PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Submerged Arc	1	0.0342		0.036				0.001	0	0.000	0	0.000
Metal Inert Gas (MIG)(ER5154)	4	0.215		0.0241	0.00003		0.00001	0.021	0.0000292	0.000	8.60E-06	0.00004
Stick (E7018 electrode)	0	0		0.0211				0.000	0	0.000	0	0.000
Tungsten Inert Gas (TIG)(carbon steel)	0	0		0.0055				0.000	0	0.000	0	0.000
Oxyacetylene(carbon steel)	0	0		0.0055				0.000	0	0.000	0	0.000

	Number of Stations	Max. Metal Thickness Cut	Max. Metal Cutting Rate	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				TOTAL HAPS (lb/hr)
FLAME CUTTING		(in.)	(in./minute)	PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	0	0	0	0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane	0	0	0	0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma	0	0	0					0.000	0.000	0.000	0.000	0.000

EMISSION TOTALS	PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr	0.02	0.00003	0.000	0.00001	0.00004
Potential Emissions lbs/day	0.53	0.00	0.00	0.00	0.00
Potential Emissions tons/year	**0.10**	0.0001	0.000	0.00004	0.0002

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.
Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).
Welding and other flame cutting emission factors are from an internal training session document.
See AP-42, Chapter 12.19 for additional emission factors for welding.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: Kawneer Company
Address City IN Zip: 751 International Drive, Franklin, IN
MSOP: 081-11715
Plt ID: 081-00037
Weil Mclain Boiler **Reviewer:** Craig J. Friederich
Showing Compliance with 326 IAC 6-2-4 **Date:** December 27, 1999

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.64	5.61

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.005	0.021	0.002	0.280	0.015	0.235

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
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 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 9 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: Kawneer Company, Inc.
Address City IN Zip: 751 International Drive, Franklin, Indiana 46131
Part 70: 081-11715
Plt ID: 081-00037
Reviewer: Craig J. Friederich
Date: December 27, 1999

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	5.887E-06	3.364E-06	2.102E-04	5.046E-03	9.531E-06

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.402E-06	3.084E-06	3.924E-06	1.065E-06	5.887E-06

Methodology is the same as page 8.

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

Appendix A: Emissions Calculations
PM Potential Emissions

Company Name: **Kawneer Company**
Address City IN Zip: **751 International Drive, Franklin, IN**
MSOP: **081-11715**
Plt ID: **081-00037**
Reviewer: **Craig J. Friederich**
Date: **December 27, 1999**

Material	Buffing dust collected (lbs/hr)	Emission Rate (tons/yr)
Buffing Operations		
Uncontrolled	1.48	**6.50**
Control Efficiency	99.0%	
Controlled Emissions	0.015	**0.065**