

**APPLICATION FOR REVISION OF  
TITLE V PERMIT PROCESSED CONCURRENTLY  
WITH  
CONSTRUCTION PERMIT MODIFICATION AND  
APPLICATION OF ISSUANCE OF AIR OPERATION PERMIT  
FOR EXTRUSION DIVISION**

**HYDRO ALUMINUM  
200 RIVIERA BOULEVARD  
ST. AUGUSTINE, FL**

**Submitted to:**

**Mr. Christopher L. Kirts, P.E.  
District Air Program Administrator  
Florida Department of Environmental Protection  
Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, FL 32256-7590**

STATE OF FLORIDA  
DEPARTMENT OF  
ENVIRONMENTAL  
PROTECTION  
2003 DEC -1 P 4: 20  
NORTHEAST DISTRICT  
JACKSONVILLE, FL

**Prepared by:**

**LAN Associates Engineering, Planning, Architecture, Surveying, Inc.  
66 Cuna Street  
St. Augustine, FL 32084**

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Ref. #2.392.41  
December 1, 2003

**LAN**

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ENGINEERING • PLANNING • ARCHITECTURE • SURVEYING, INC.  
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SINCE 1965

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December 1, 2003

**BY HAND DELIVERY**

Mr. Christopher L. Kirts, P.E.  
District Air Program Administrator  
Florida Department of Environmental Protection  
Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, FL 32256-7590

Subject: Title V Permit  
Hydro Aluminum North America  
Permit No.: 1090013-006-AV  
LAN Ref. #2.392.41

Dear Mr. Kirts:

On behalf of Hydro Aluminum-St. Augustine, LAN Associates Engineering, Planning, Architecture, Surveying, Inc. (LAN) hereby submits a revised permit application (Attachments 1 through 3) to renew the Title V permit for the extrusion operations at the referenced facility. This letter will also respond to various questions not yet answered in former Department RAI correspondence and requests for other permit modifications. Please note that the application covers the Hydro Aluminum Extrusion Division operations only. The previously submitted application (July 1, 2003) under Sections 1 and 2 will cover the Remelt Division Operations and remains unchanged at this time.

**PSD Determination**

In a previous RAI, the Department made a determination that the facility is a "secondary aluminum production" plant that would be of the 28 Major Source Categories defined in both Florida and EPA regulations. Based upon the site specific definition of "secondary metal production facility" as provided in 40 CFR Part 63, Subpart RRR Section 1503, the extrusion operations and solvent usage are exempt from any determination that the operations are "secondary aluminum" or secondary metal production. See the following excerpt from the regulations at Section 1503 of the regulations:

New Jersey Offices:  
445 Godwin Ave.  
Midland Park, NJ 07432  
(201) 447-6400

662 Goffle Road  
Hawthorne, NJ 07506  
(973) 423-0350

Florida Office:  
66 Cuna Street  
St. Augustine, FL 32084  
(904) 824-6999

Kentucky Office:  
1609 Kentucky Avenue  
Paducah, KY 42003  
(270) 442-2912

New York Office:  
252 Main Street  
Goshen, NY 10924  
(914) 615-0350

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*The determination of whether a facility is a secondary aluminum production facility is only for purposes of this subpart and any regulatory requirements which are derived from the applicability of this subpart, and is separate from any determination which may be made under other environmental laws and regulations, including whether the same facility is a "secondary metal production facility" as that term is used in 42 U.S.C. §7479(1) and 40 CFR 52.21(b)(1)(i)(A) (prevention of significant deterioration of air quality.)*

The Extrusion Division of Hydro, therefore, is not a secondary aluminum facility as defined in 40 CFR Subpart RRR. In addition, the requested VOC emissions are below 200 tons/year, and therefore, the facility will not be major for either a regulated or hazardous air pollutant. The facility is not performing any activities designed to escape any MACT requirements, however, you will note Xylene and MEK solvent has been totally replaced with Butyl Acetate for cleaning the wet paint line. The facility has reduced solvent cleaning requirements from the former need for approximately 3300 gallons/year of HAP solvent to approximately 500 gallons of a non-HAP solvent (butyl acetate.) The only remaining HAP emissions from extrusion division are the HAP percentages that are in the current paints being utilized at the facility for one United States government contract.

The Remelt Division will be a secondary aluminum production facility upon melting painted scrap at a future date. At present, the facility is melting clean charge only and is not subject to the NESHAP standard.

### **Request to Split Facility/Permits**

Since the acquisition of the former VAW facilities and the integration of the operations, it has been the goal of Hydro to make a request to split the facilities into two operations. This effort is being accomplished on a nationwide basis. Due to the complexity of the issues, we have prepared a supplementary document enclosed with this application, which is entitled *Supplemental Documentation and Request to Split Facilities and Permits*. Please review this information along with this application. It is envisioned by Hydro to split all facilities throughout the United States that are "wall-to-wall" facilities that contain both the casting and extrusion/paint line operations.

### **Cap Information**

The Hydro Extrusion Division is currently requesting a facility-wide cap for VOC emissions at 190 tons/year. This is less than the former cap for the entire facility. This Extrusion Division permit is envisioned as a flexible operations permit that will allow some expansion of the solvent use and a reduction of paint line emissions. No other limits are requested or necessary to provide compliance certification. The facility is continuing "best efforts" to totally eliminate the use of wet paint at the facility, and currently, there is only one contract with the United States government that requires the use of wet paint. Hydro management will continue to pursue the use of powder paint for all its operations. In fact, the facility is planning to modify the current powder paint line by adding a "totally enclosed" booth with a cartridge system to contain air

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emissions and the wet paint drying oven will have new energy efficient doors installed that will virtually reduce emissions. This is planned for 2004.

**Other Miscellaneous RAI Issues**

The missing segments from the previous application for the paint line and drying process have been eliminated from this permit application and are moot. The activities at the paint line are greatly reduced; the previous limit was 8,375 gallons/year of wet paint. The current wet paint needs are 3,732 gallons or less annually, and HAP emissions from this wet paint line are greatly reduced. The paint line unit is combined with the other VOC emitting units and a facility-wide cap of 190 tons, with no more than 3,732 gallons of HAP containing paint used at the facility is requested. The remaining VOC emissions will result from solvent cleaning operations at the combined unit EU004.


The facility seeks to operate continuously with emissions limitations based on consumption of VOC containing materials including wet paint and solvent. No limits are requested for aluminum throughput as this is immaterial to the emissions at the plant. The critical elements are the usage of solvent and VOC containing paints. The facility anticipates the continuation of recordkeeping in much the same fashion as is currently in place to enable the facility management to certify compliance at year's end. See Attachment 4 for back-up calculations, and Tables 1 through 3 in Attachment 5 for review of the proposed limits.

In the past, one or more of the facility units slightly exceeded LPG usage. However, with the current application and requested permit, there will be one "facility-wide" cap for the usage of LPG. Table 2 in Attachment 2 of the application, shows the total LPG usage with resulting minimal emissions.

The required responsible official and professional engineer certifications are included in the application package as required by previous RAIs.

Thank you for your review of this application submittal and accompanying request for permit modification and facility split. We realize there are several issues on the table, and LAN and Hydro are prepared to meet with DEP or provide further information as may be necessary to meet your requirements.

Very truly yours,

  
Judith A. Van Houten  
Compliance Manager

/jav

2.392.41-L-Kirts-Ext Div App -031201-jvh

Attachments: #1-Extrusion Division Facility Information - DEP Form 62-210.900(1)

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## Application Information

#2-Combined EU004 Facility Wide VOC Cap - DEP Form 62-210.900 (1)

## General Emissions Unit Information

#3-Powder Paint Booth DEP Form -DEP Form 62-210.900 (1) - General

## Emissions Unit Information

#4-Air Emission Back-up Calculations

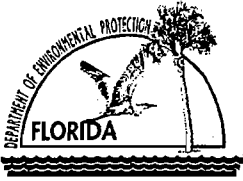
#5-Tables of Material Process, Data, and LPG Usage

#6-Table of Applicable Regulations

Copies to: Mr. Eugene D'Iorio / Hydro  
Ms. Dee Tankersley / Hydro

**Attachment 1**

**Extrusion Division Facility Information – DEP Form 62-210.900(1)  
Application Information**



# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

#### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

**Air Operation Permit** – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

**Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option)**

– Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

#### Identification of Facility

1. Facility Owner/Company Name: Hydro Aluminum North America, Inc.	
2. Site Name: Hydro Aluminum	
3. Facility Identification Number: 1090013	
4. Facility Location... Street Address or Other Locator: City: St. Augustine                      County: St. Johns                      Zip Code: 32086	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: Handi Wang	
2. Application Contact Mailing Address... Organization/Firm: LAN Associates, Inc. Street Address: 66 Cuna Street City: St. Augustine                      State: FL                      Zip Code: 32084	
3. Application Contact Telephone Numbers... Telephone: ( 904 ) - 824-6999            ext.            Fax: (904) 824 - 0726	
4. Application Contact Email Address: hw@lan-fl.com	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Project Number(s):	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

## APPLICATION INFORMATION

### Purpose of Application

This application for air permit is submitted to obtain: (Check one)

#### **Air Construction Permit**

Air construction permit.

#### **Air Operation Permit**

Initial Title V air operation permit.

Title V air operation permit revision.

Title V air operation permit renewal.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

Air construction permit and Title V permit revision, incorporating the proposed project.

Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### Application Comment

This application is submitted to revise the facility Title V air permit and to request that two separate permits be issued for these facilities. The Casthouse operations (including one remelting furnace (EU #9), one holding furnace (EU #8), and two homogenizers (EU #10) will be considered the remelt facility, and remains as submitted on July 1, 2003 as a Title V facility. See Sections 1 and 2 of the previous application. This application is submitted to combine the units at the extrusion facility into a separate permit and to have a facility wide cap for VOC emissions (emissions limited) and the use of LPG gas (fuel usage limited.) The extrusion division will be a synthetic non-Title V source. The emission sources in the Wet Paint Booths (EU004) OPC Tube Mill (one Dip Tank (EU #11, one Age Oven, EU #12, and the Workshop, EU #14) are combined into one emission unit (EU #04). The use of xylene and MEK solvents in the Paintline (EU #4) is replaced with a non-hazardous Butyl Acetate solvent. The VOC emissions will be limited at the Extrusion Division units to 190 tons/year/ The application is also submitted to cap the solvent use limits and VOC emission limits in a facility-wide only, not by each emission unit. HAP emissions have been reduced to less than 5 tons total annually and are considered in the total VOC emissions. They are listed in this application for DEP review.





# APPLICATION INFORMATION

## Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : N/A
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Owner/Authorized Representative Email Address:
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i>  _____ Signature  _____ Date

## APPLICATION INFORMATION


### Application Responsible Official Certification

**Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."**

1. Application Responsible Official Name: Eugene J. D'Iorio
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: Hydro Aluminum Street Address: 200 Riviera Boulevard City: St. Augustine      State: FL      Zip Code: 32086
4. Application Responsible Official Telephone Numbers... Telephone: (904) 795 - 1500      ext. Fax: (904) 794 - 1508
5. Application Responsible Official Email Address:
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  Signature <u>E. J. D'Iorio Jr.</u> Date <u>11/26/03</u>

**APPLICATION INFORMATION**

**Professional Engineer Certification**

1. Professional Engineer Name: Guy D. Van Doren Registration Number: 40454
2. Professional Engineer Mailing Address... Organization/Firm: LAN Associates, Inc. Street Address: 66 Cuna Street City: St. Augustine State: FL Zip Code: 32082
3. Professional Engineer Telephone Numbers... Telephone: (904) 824 - 6999 ext. Fax: (904) 824 - 0726
4. Professional Engineer Email Address: gvd@lan-fl.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature  Date 12/1/03 (seal)

\* Attach any exception to certification statement.

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates... Zone 17      East (km)    470.98 North (km)    3296.85		2. Facility Latitude/Longitude... Latitude (DD/MM/SS)    29/48/13 Longitude (DD/MM/SS) 81/18/01	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 33	6. Facility SIC(s):3354
7. Facility Comment :			

#### Facility Contact

1. Facility Contact Name: Dee Tankersley
2. Facility Contact Mailing Address... Organization/Firm: Hydro Aluminum North America, Inc. Street Address: <div style="text-align: center; margin-top: 10px;">                     City: St. Augustine      State: FL      Zip Code: 32086                 </div>
3. Facility Contact Telephone Numbers: Telephone: (904) 794 - 1500      ext.1505      Fax: (904) 794 - 1508
4. Facility Contact Email Address: dee.tankersley@hydro.com

#### Facility Primary Responsible Official

**Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."**

1. Facility Primary Responsible Official Name: Mr. Martin Carter
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Hydro Aluminum North America, Street Address: 801 International Drive, Suite 200 <div style="text-align: center; margin-top: 10px;">                     City: Linthicum      State: MD      Zip Code: 21090                 </div>
3. Facility Primary Responsible Official Telephone Numbers... Telephone: (410) 487-8052      ext.      Fax: (410) 487-8053
4. Facility Primary Responsible Official Email Address: martin.carter@hydro.com

**Facility Regulatory Classifications**

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”

1. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Synthetic Non-Title V Source	
3. <input type="checkbox"/> Title V Source	
4. <input type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input checked="" type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:  The Extrusion Division has reduced HAP emissions to below 5 tons total for the facility.	



**B. EMISSIONS CAPS**

**Facility-Wide or Multi-Unit Emissions Caps**

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
VOC	Yes		n/a	190	ESCPSD
H120	No	4			ESCPSD
H186	No	4	n/a		ESCPSD

**7. Facility-Wide or Multi-Unit Emissions Cap Comment:**

The HAP emissions are listed separately to comply with regulations that require HAPS be to identified in the permit application. The HAP emissions are below 5 tons per year and are considered part of the total VOC cap of 190 tons/year. Since the emissions are low, they are not reduced to escape MACT standard but to escape PSD (as part of a total VOC emission.)



### C. FACILITY ADDITIONAL INFORMATION

#### Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: <u>09/22/2000</u>
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: <u>09/22/2000</u>
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____

#### Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction or Modification: <input checked="" type="checkbox"/> Attached, Document ID: <u>Letter</u>
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: Attachment 1
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Requirements for FESOP Applications**

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):  
 Attached, Document ID: \_\_\_\_\_  Not Applicable (no exempt units at facility)

**Additional Requirements for Title V Air Operation Permit Applications**

1. List of Insignificant Activities (Required for initial/renewal applications only):  
 Attached, Document ID: \_\_\_\_\_  Not Applicable (revision application)
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):  
 Attached, Document ID: \_\_\_\_\_  
 Not Applicable (revision application with no change in applicable requirements)
3. Compliance Report and Plan (Required for all initial/revision/renewal applications):  
 Attached, Document ID: \_\_\_\_\_  
Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):  
 Attached, Document ID: \_\_\_\_\_  
 Equipment/Activities On site but Not Required to be Individually Listed  
 Not Applicable
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :  
 Attached, Document ID: \_\_\_\_\_  Not Applicable
6. Requested Changes to Current Title V Air Operation Permit:  
 Attached, Document ID: letter \_\_\_\_\_  Not Applicable

**Additional Requirements Comment**

**Attachment 2**

**Combined EU004 Facility Wide VOC Cap – DEP Form 62-210.900 (1)  
General Emissions Unit Information**

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities, which have at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities, which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: 5 Paint booths, 2 solvent cleaning tanks, 1 Bake Oven, 3 Age Ovens, and 1 Pyrolysis Furnace.

3. Emissions Unit Identification Number: EU004

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 33	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:  
Manufacturer: \_\_\_\_\_ Model Number: n/a

10. Generator Nameplate Rating:

11. Emissions Unit Comment: This numbered unit (EU#004) includes the facility-wide emission sources previously permitted as Emission Units #004 (Paintline), #011, #012, #014, (OPC Operations) and #015 (140 Solvent). The processes include aluminum surface coating with liquid paints, solvent cleaning of aluminum, and heat treatment with liquid propane fuel.

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description:

Fabric filters are used to control PM emissions from the 5 paint booths; the unit has an afterburner to destroy VOC in the Pyrolysis Furnace. The drying oven will have new doors installed in 2004 for energy efficiency and to further reduce fugitive emissions. No other changes are anticipated.

2. Control Device or Method Code(s): 21

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**B. EMISSIONS UNIT CAPACITY INFORMATION**

**(Optional for unregulated emissions units.)**

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate: not applicable
2. Maximum Production Rate: n/a
3. Maximum Heat Input Rate: 12 mmBtu/hr
4. Maximum Incineration Rate:       pounds/hr tons/day
5. Requested Maximum Operating Schedule: 24 hours/day                               7 days/week 52 weeks/year                              8760 hours/year
6. Operating Capacity/Schedule Comment: The throughput rate stated here at 5400 tons/year refers to aluminum parts that are processed through the paint line, solvent cleaning tanks, or heat treatment ovens. This limit is provided for information only and is not requested to be a limit in the permit.

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**C. EMISSION POINT (STACK/VENT) INFORMATION  
(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Previously submitted		2. Emission Point Type Code: 1			
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: 1 Fabric Filter for each of 5 Paint booths, 1 Stack for the Bake Oven, 1 Stack for the Pyrolysis Furnace.					
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: n/a					
5. Discharge Type Code: W		6. Stack Height: 30 feet		7. Exit Diameter: 2.0 feet	
8. Exit Temperature: 80 °F		9. Actual Volumetric Flow Rate: 6000 acfm		10. Water Vapor: 2.00%	
11. Maximum Dry Standard Flow Rate: 5749 dscfm			12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates: Zone: 17 East (km): 470.98 North (km): 3296.520			14. Emission Point Latitude/Longitude: Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15. Emission Point Comment: The above flow data are for the #1 Paint Booth as representative of the other units.					

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**D. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type): LPG used as heating source for the Age Oven, Bake Oven & Pyrolysis Furnace.		
2. Source Classification Code (SCC): 3-90-010-89		3. SCC Units: Thousand Gallons Burned (liquid fuels)
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 242.4	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 90
10. Segment Comment: LPG usage rate is the sum usage for the Age Oven, Bake Oven and the Pyrolysis Furnace and will represent the facility cap for LPG usage for the facility.		



**Segment Description and Rate:** Segment 2 of 2

1. Segment Description (Process/Fuel Type): Aluminum surface coating with liquid paint products and solvent cleaning		
2. Source Classification Code (SCC): 40100303		3. SCC Units: Gallons used
4. Maximum Hourly Rate:	5. Maximum Annual Rate: NA	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: The materials of use include liquid paint and petroleum solvents. The total VOC emissions resulting from these operations will be no more than 190 tons annually, with no more than 3732 gallons of HAP/VOC containing paint being used at the facility.		

**Segment Description and Rate:** Segment 3 of 3

1. Segment Description (Process/Fuel Type): n/a		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [1] of [6]

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control: %
3. Potential Emissions: 190.03 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor:  Reference:	7. Emissions Method Code: 0
8. Calculation of Emissions: See Attachment 4 and 5.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: The VOCs are dominantly evaporated through fugitive emissions in the paintline and solvent cleaning operations. Undefined portion of the VOCs are emitted through age oven stacks.	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [1] of [6]

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS****Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.****Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: ESCPSD	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 190.03 tons/yr	4. Equivalent Allowable Emissions: 190.03 tons/yr
5. Method of Compliance: Recordkeeping of VOC emissions from liquid paint usage, solvent consumption, and LPG combustion.	
6. Allowable Emissions Comment (Description of Operating Method): Facility will restrict wet paint to less than 3732 gallons of paint with maximum Xylene emissions of 3.3 tons/year and .44 tons year of MEK. These will be included in 190 tons/year VOC CAP.	

**Allowable Emissions** Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: N/A lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [2] of [6]

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: PM and PM <sup>10</sup>	2. Total Percent Efficiency of Control: %
3. Potential Emissions: 0.05 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable):	
6. Emission Factor: 0.4 lbs/1000 gals.  Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions: See Attachments 4 and 5 for emissions calculation. Emissions are insignificant and no PM limit is anticipated.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: PM not limited in current permit.	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [3] of [6]

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: NOX	2. Total Percent Efficiency of Control: %
3. Potential Emissions: 1.7 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable):	
6. Emission Factor: 14 lbs/1000 gals.  Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions: See Attachment 4 and 5 for calculations and tables. This pollutant is not emissions limited.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [4] of [6]

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS****(Optional for unregulated emissions units.)****Potential/Estimated Fugitive Emissions****Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control: %
3. Potential Emissions: 0.23 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable):	
6. Emission Factor: 1.9 lbs/1000 gal.  Reference: EPA Fire 6.23	7. Emissions Method Code: 3
8. Calculation of Emissions: See Attachment 4 and 5 for emission calculation.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CO emissions are not limited in this unit	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [5] of [6]

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: H120	2. Total Percent Efficiency of Control: %
3. Potential Emissions: 0.44 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable):	
6. Emission Factor: n/a  Reference:	7. Emissions Method Code: 0
8. Calculation of Emissions: See Attachment 4 and 5 for emission calculation. The MEK annual emissions potential is reduced from the existing TV permit because Butyl Acetate solvent replaces it. This is provided as a listing of the HAP emission and is included in total VOC emissions.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [5] of [6]

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.44 tons/year	4. Equivalent Allowable Emissions: 0.44 tons/year
5. Method of Compliance: Recordkeeping	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions    of   

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: N/A lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions    of   

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Pollutant [6] of [6]

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: H186	2. Total Percent Efficiency of Control: %
3. Potential Emissions: 3.3 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable):	
6. Emission Factor: n/a  Reference:	7. Emissions Method Code: 0
8. Calculation of Emissions: See Attachment 4 and 5 for emission calculation. The xylene annual usage rate is reduced from the existing TV air permit rate because Butyl Acetate replaces it as the paint solvent. The amount of Xylene is listed for information only and is considered as part of the VOC total CAP.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

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**POLLUTANT DETAIL INFORMATION**

Pollutant [6] of [6]

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS****Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.****Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 3.3 tons/year	4. Equivalent Allowable Emissions: 3.3 tons/year
5. Method of Compliance: Recordkeeping	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: N/A lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_ of \_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

**Section [1] of [2]**

**I. EMISSIONS UNIT ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

<p>1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 6/96;</p>
<p>2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 6/96</p>
<p>3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 6/96</p>
<p>4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 6/96</p> <p><input type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p>

6. Compliance Demonstration Reports/Records

Attached, Document ID: \_\_\_\_\_  
Test Date(s)/Pollutant(s) Tested: \_\_\_\_\_

Previously Submitted, Date: 6/96, and each year thereafter  
Test Date(s)/Pollutant(s) Tested: \_\_\_\_\_

To be Submitted, Date (if known): \_\_\_\_\_  
Test Date(s)/Pollutant(s) Tested: \_\_\_\_\_

Not Applicable

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute

Attached, Document ID: \_\_\_\_\_  Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Requirements for Title V Air Operation Permit Applications**

1. Identification of Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: Attachment 3
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

5. Acid Rain Part Application

- Certificate of Representation (EPA Form No. 7610-1)
  - Copy Attached, Document ID: \_\_\_\_\_
- Acid Rain Part (Form No. 62-210.900(1)(a))
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- New Unit Exemption (Form No. 62-210.900(1)(a)2.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [1] of [4]

**Additional Requirements Comment**

**Attachment 3**

**Powder Paint Booth DEP Form –DEP Form 62-210.900 (1) - General  
Emissions Unit Information**



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: This unit is currently permitted in the facility Title V permit and no changes are requested at this time.

3. Emissions Unit Identification Number: 005

4. Emissions Unit Status Code: A	5. Commence Construction Date: n/a	6. Initial Startup Date: 2/88	7. Emissions Unit Major Group SIC Code: 33	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:

Manufacturer:

Model Number: n/a

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment: Aluminum parts are coated with powder paint products. Emission associated with the operation is PM only.

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**Emissions Unit Control Equipment 1**

1. Control Equipment/Method(s) Description:

Cyclone is used to remove coarser PM from the exhaust air ducted from the Powder Paint Booth. The facility plans to replace the powder paint booths with better containment and cartridge capture system. This is budgeted for 2004; additional information is not available at this time.

2. Control Device or Method Code(s): 008

Emissions **EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**Emissions Unit Control Equipment 2**

1. Control Equipment/Method(s) Description:

A baghouse is used to remove finer PM in the airflow ducted from the cyclone. The facility is applying herein for approval to modify the current paint booth by replacing the current booths with self-contained booths with a cartridge capture system. This is in planning phase only and is budgeted but final vendors have not been chosen. Control Device Codes will need revision once final plans are in place.

2. Control Device or Method Code(s): 18



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**C. EMISSION POINT (STACK/VENT) INFORMATION**  
**(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Previously provided		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Single Point			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: n/a			
5. Discharge Type Code:		6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: 80°F		9. Actual Volumetric Flow Rate: 7400 acfm	10. Water Vapor: 2.00%
11. Maximum Dry Standard Flow Rate: 7091dscfm		12. Nonstack Emission Point Height: 2 feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 470.98 North (km): 3,296.516		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: The facility requests no operating limits for this unit.			

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**D. SEGMENT (PROCESS/FUEL) INFORMATION**

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type): Powder Paint is used for Al part coating		
2. Source Classification Code (SCC): 3-99-999-94		3. SCC Units: lb/hr
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 192,000.00	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

**Segment Description and Rate:** Segment of

1. Segment Description (Process/Fuel Type): N/A		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 0.288 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): 1 to 5 tons/year	
6. Emission Factor:  Reference:	7. Emissions Method Code: 0
8. Calculation of Emissions: Annual powder paint usage rate = 96 tons. Assume that 30% of the paints applied is air-born. Uncontrolled PM emissions = 96 tons/yr x 0.3 = 28.8 tons/yr Combined control efficiency for the baghouse and cyclone = 99%. Controlled PM emission = 28.8 tons/yr x 1% = 0.288 tons/yr.	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: Fugitive emissions cannot be quantified. The unit is not subject to a pollutant specific emissions limitation.	



**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 0 of 0

1. Basis for Allowable Emissions Code: N/A	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions 0 of 0

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: N/A lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**G. VISIBLE EMISSIONS INFORMATION**

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 5% Exceptional Conditions: 20% Maximum Period of Excess Opacity Allowed: 3min/hour	
4. Method of Compliance: PM emission control with cyclone and baghouse.	
5. Visible Emissions Comment:	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**H. CONTINUOUS MONITOR INFORMATION**

Complete if this emissions unit is or would be subject to continuous monitoring.

**Continuous Monitoring System:** Continuous Monitor 0 of 0

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**I. EMISSIONS UNIT ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

<p>1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>June 1996</u></p>
<p>2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>June 1996</u></p>
<p>3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>June 1996</u></p>
<p>4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p>

6. Compliance Demonstration Reports/Records

Attached, Document ID: \_\_\_\_\_  
Test Date(s)/Pollutant(s) Tested: \_\_\_\_\_

Previously Submitted, Date: \_\_\_\_\_  
Test Date(s)/Pollutant(s) Tested: \_\_\_\_\_

To be Submitted, Date (if known): \_\_\_\_\_  
Test Date(s)/Pollutant(s) Tested: \_\_\_\_\_

Not Applicable

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute

Attached, Document ID: \_\_\_\_\_  Not Applicable

**EMISSIONS UNIT INFORMATION**

**Section [2] of [2]**

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Requirements for Title V Air Operation Permit Applications**

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

5. Acid Rain Part Application

- Certificate of Representation (EPA Form No. 7610-1)
  - Copy Attached, Document ID: \_\_\_\_\_
- Acid Rain Part (Form No. 62-210.900(1)(a))
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- New Unit Exemption (Form No. 62-210.900(1)(a)2.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
  - Attached, Document ID: \_\_\_\_\_
  - Previously Submitted, Date: \_\_\_\_\_
- Not Applicable

**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**Additional Requirements Comment**

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**Attachment 4**

**Air Emission Back-up Calculations**

## Attachment 4

### AIR EMISSION BACK-UP CALCULATION for Extrusion Division Operations

Hydro Aluminum  
St. Augustine, FL  
LAN Ref. #3.392.41

Extrusion Division Aluminum Throughput Goals to 2007 = 5400 tons/yr.

#### 1.0 VOC emissions from solvent usage

Solvents and paints are used for surface coating in the Paintline and used to clean aluminum tubes in the OPC Tube Mill and the Main Plant. Xylene, methyl ethyl ketone (MEK), and other volatile organic compounds (VOC) are the formulation chemicals for paint used in paintline. The Butyl Acetate is also used to replace Xylene and MEK as solvent to clean Paintline equipment. Many paint products used in the paintline contain a range of xylene, MEK and other VOC contents. The annual emission rates of xylene, MEK, and VOC will be less than in the existing permit because xylene and MEK will no longer be used as solvents. However both xylene and MEK are present in the paint products, which can be emitted as a result of paint spraying. VOC limits will be used from a facility wide basis and will include the HAP emissions.

##### 1.1 Xylene Emissions

Xylene is only use in the Paintline as a liquid paint component.

Annual xylene emissions = 3.3 tons/yr  
(Lower than 7.7 tons/yr in the existing permit and based on xylene content in 3,732 gallons of paint annually.

##### 1.2 MEK Emissions

MEK is also present in the paint products as a formulation component.

Annual MEK use rate = Annual MEK emissions  
= 0.44 tons/yr  
(lower than 9.72 tons/yr in the existing permit based on 3,732 gallons paint usage).

### 1.3 *Volatile Organic Compounds (VOCs) Emissions:*

#### 1.3.1 Paintline

Annual VOC use from liquid paint = Annual VOC emissions  
= 9.39 tons/yr.

Butyl Acetate solvent use = 500 gallons/yr x 7.34 lb/gallon  
= 3,670 lbs/yr/2000 lbs/ton  
= 1.835 tons/yr.

Total annual VOC emissions = 9.39 tons/yr + 1.835 tons/yr  
= 11.22 tons/yr (Lower than 31.43 tons/yr  
in the existing permit).

#### 1.3.2 Solvent Usage for aluminum tubes cleaning

Annual solvent usage = 175 tons/yr (include 140 Solvent in the  
Main Plant and LPA Solvent in OPC Mill).

Operation schedule = 8760 hrs/yr.

The OPC Tube Mill includes three original emission units: OPC Solvent Tank (EU #011), OPC Age Oven (EU #012), and Workshop (EU #014). The 140 solvent cleaning operations are from the existing Emission Unit #15 in the Main Plant. The solvent annual use capacity of 175 tons/yr is only slightly higher than the combination of solvent uses permitted for the existing EU #11 and EU #15:

Permitted solvent use for EU #11 = 58.5 tons/yr.

Permitted solvent use for EU #15 = 113.62 tons/yr.

Sum solvent permitted use capacity = 172.12 tons/yr.

However, the facility-wide VOC emission capacity is reduced from the existing permit due to VOC emission capacity reduction in the Paintline.

The facility-wide VOC emissions (excluding LPG combustion products):

Facility-wide VOC emission capacity = 175 tons/yr + 11.22 tons/yr + 3.3 tons/yr  
+ 0.44 tons/yr + .061 tons/yr. (LPG combustion)

= 190.03 tons/yr.

Materials use rates are summarized in Table 1; and air emissions are summarized in Table 3.

## 2.0 *Liquid Propane Gas (LPG) Combustion*

LPG input rate for bake oven = 21.7 gals/hr.

LPG input rate for pyrolysis furnace = 3.8 gals/hr.

LPG input rate for the Age Oven = 30 gals/hr.

Sum LPG use rate = 55.5 gals/hr.

Emission factors for LPG combustion (SCC #39001089):

PM = 0.4 lb/1000 gallons;  
 PM10 = 0.4 lb/1000 gallons;  
 NOx = 14 lb/1000 gallons;  
 CO = 1.9 lb/1000 gallons;  
 VOC = 0.5 lb/1000 gallons.

PM emission rate = 55.5 gals/hr x 0.4 lb/1000 gal  
 = 0.022 lbs/hr.

PM-10 emission rate = 55.5 gals/hr x 0.4 lbs/1000 gal  
 = 0.022 lbs/hr.

NOx emission rate = 55.5 gals/hr x 14 lbs/1000 gal  
 = 0.777 lbs/hr.

VOC emission rate = 55.5 gals/hr x 0.5 lbs/1000 gal  
 = 0.028 lbs/hr.

VOC emission rate from pyrolysis = 0.12 lbs/hr (from existing permit).

CO emission rate = 55.5 gals/hr x 1.9 lb/1000 gal  
 = 0.1 lbs/hr.

*Operations schedule for age oven and bake oven: 24 hr/day, 7 day/wk, 52 wk/yr  
 (8760 hr/yr)*

*Pyrolysis oven: 600 hrs/yr average operation.*

Annual LPG use for Bake Oven	= 21.7 gals/hr x 8760 hrs/yr = 190,092 gals/yr.
Annual LPG use for Pyrolysis Oven	= 3.8 gal/hr x 600 hrs/yr = 2280 gal/yr.
Annual LPG use for Age Oven	= 50,000 gals/yr.
Total LPG use for both furnaces	= 190,092 gal/yr+2280 gal/yr+50,000 gal/yr = 242,372 gallons/yr.
Annual PM emission capacity	= 242,372 gals/yr x 0.4 lbs/1000 gal = 97 lbs/yr/2000 lbs/ton = 0.048 tons/yr.
Annual NOx emission capacity	= 242,372 gals/yr x 14 lbs/1000 gal = 3393 lbs/yr/2000 lb/ton = 1.7 tons/yr.
Annual VOC emission capacity	= 242,372 gals/yr x 0.5 lbs/1000 gal = 121 lbs/yr/2000 lbs/ton = 0.06 tons/yr.
Annual CO emission capacity	= 242,372 gals/yr x 1.9 lbs/1000 gal = 460 lbs/yr/2000 lbs/ton = 0.23 tons/yr.

Annual emissions due to LPG combustion are summarized in Table 2.

### 3.0 Powder Paint Booth PM Emissions Estimates (Emission Unit #5)

Aluminum tube throughput rate	= 800 lbs/hr.
Powder paint use rate	= 40 lbs/hr.
Annual powder paint use capacity	= 96 tons/yr.
Annual operation schedule:	24 hours/day, 7 days/wk, 52 wks/yr (8760 hours/yr)
Powder application efficiency	= 70% (estimated)
Assumed that the other 30%	is air-born.
Uncontrolled PM emission rate	= 40 lbs/hr x 30% = 12 lbs/hr.

Cyclone and baghouse control efficiency is 99%.

Controlled PM emission rate       = 12 lbs/hr x 1%  
= 0.12 lb/hr.

Annual PM emission capacity       = 96 tons/yr x 30% x 1%  
= 0.288 tons/yr

2.392.41-C-TV Revision-Emission-031201-HW

**Attachment 5**

**Tables of Material Process, Data, and LPG Usage**

**Table 1**

**VOC Emission Data for Aluminum Extrusion Operations  
Hydro Aluminum**

Process	Annual Use or Process Rates									TOTAL
	Al Production tons/yr	VOC Material gal/yr	LPG gal/yr	VOC Emissions (tons/yr)						
				Xylene	MEK	Paint VOC	LPG Combustion	Butyl Acetate	Solvent	
5 Wet Paintbooths		3,732		3.3	0.44	9.39				
Ovens & Pyrolysis			192,372				0.048			
OPC Tube Mill Age Oven			50,000				0.013			
Solvent for Al Cleaning	5,400	53,929								
<b>Sum</b>	<b>5,400</b>		<b>242,372</b>	<b>3.30</b>	<b>0.44</b>	<b>9.39</b>	<b>0.06</b>	<b>1.84</b>	<b>175</b>	<b>190.03</b>

Note: Solvent for Aluminum Cleaning will be proportionately split between LPA and 140 Solvent as needed to meet production limits



**Table 2**  
**Air Emission Capacities due to Propane Combustion**  
**Air Construction Permit Application**  
**Extrusion Operation, Hydro Aluminum**  
**St. Augustine, FL**

<b>Emission Sources</b>	<b>Baking Oven</b>	<b>Pyrolysis Oven</b>	<b>OPC Age Oven</b>	<b>Total</b>
LPG Use rate, gal/hr	21.7	3.8	30	55.5
Annual LPG use, gal/yr	190,092	2,280	50,000	242,372
Pollutants	<i>Emission Factor (lb/1000 gallons)</i>			
PM	0.4	0.4	0.4	
PM10	0.4	0.4	0.4	
NOx	14	14	14	
VOC	0.5	0.5	0.5	
CO	1.9	1.9	1.9	
	<i>Air Emission Rates (lbs/hr)</i>			
PM	0.009	0.002	0.012	0.022
PM10	0.009	0.002	0.012	0.022
NOx	0.304	0.053	0.420	0.777
VOC	0.011	0.002	0.015	0.028
CO	0.041	0.007	0.057	0.105
	<i>Annual Air Emission Capacities (tons/yr)</i>			
PM	0.038	0.000	0.010	0.048
PM10	0.038	0.000	0.010	0.048
NOx	1.331	0.016	0.350	1.70
VOC	0.048	0.001	0.013	0.061
CO	0.181	0.002	0.048	0.230

Note: Emission factors are from FIRE 6.23 (SCC # 39001089).

**Table 3**  
**Air Emission Summary**  
**Air Construction Permit Application**  
**Hydro Aluminum**  
**St. Augustine, FL**  
**Extrusion Processing**

Sources	Annual Emissions						
	<i>tons/yr</i>						
	PM	PM10	NOx	CO	VOC	MEK	Xylene
5 Wet Paint booths					11.23	0.44	3.3
LPG Combustion	0.048	0.048	1.7	0.23	0.06		
Solvent Cleaning					175		
Powder Paint Booth	0.288	0.288					
<b>SUM</b>	<b>0.336</b>	<b>0.336</b>	<b>1.7</b>	<b>0.23</b>	<b>186.29</b>	<b>0.44</b>	<b>3.3</b>

**Attachment 6**

**Table of Applicable Regulations**

Attachment 6

**Table of Applicable Requirements**

Hydro Aluminum  
Extrusion Operations  
St. Augustine, FL

62-4 F.A.C.  
62-4.040(1)(b) F.A.C.  
62-4.160(2) F.A.C.  
62-210.200 F.A.C.  
62-213.430(6) F.A.C.  
62-213.440 (1) F.A.C.  
62-296.320(2) F.A.C.  
62-296.320(4)©2 F.A.C.  
62-297 F.A.C.  
62-297.620 (4) F.A.C.  
(as applicable)