

## Finch Environmental, PLC

9 Heritage Park Circle  
North Little Rock, Arkansas 72116-8528

Municipal and Industrial  
NPDES Storm Water  
Pollution Prevention Plans  
Control Plans  
Environmental Permitting  
Reporting Hazardous Waste  
Pretreatment

AHSEC AC

6/27/2011

Mr. Allen Gilliam  
Pretreatment Coordinator  
ADEQ  
5301 Northshore Drive  
North Little Rock, AR 72118

Re: Southern Aluminum, ARP001059

Dear Mr. Gilliam,

Please accept the following document and supporting attachments for the referenced facility located in Magnolia, Arkansas.

In this submittal you will find the following items:

1. Semi-Annual Report for Industrial Users Regulated by 40 CFR 433;
2. Schematic drawing of the process at Southern Aluminum;
3. The results of a sample of the regulated waste streams analyzed for Metals; and
4. A Toxic Organic Management Plan (TOMP)

The analytical results of the sample taken on 2/21/2011 indicated no excursions above the monthly average and daily maximum pretreatment standards for new sources (PSNS) for metals and Cyanide.

Additionally, pH was analyzed in the laboratory to be 2.9 s.u. The plant is currently utilizing a pH meter which can be used to take instantaneous readings at the plant for pH to avoid exceeding the holding time for a sample to be analyzed for pH. Southern Aluminum continues to analyze pH each time a batch discharge occurs and logs this value. Southern Aluminum is exploring methods of pH adjustment to comply with a limit to be imposed by the POTW.

As required by regulations the City of Magnolia is being notified of this issue.

Please accept this information and contact me with questions.



complete/compliant  
no further action necessary  
-AE

Thank you.

Sincerely,

Handwritten signature of Bernie K. Finch in black ink.

Bernie K. Finch  
Finch Environmental, PLC

Attachment

Cc Colleen Tuggle, Southern Aluminum (w/o attachments)  
Thomas Russell, City of Magnolia (w/o attachments)

**SEMI-ANNUAL REPORT FOR INDUSTRIAL USERS REGULATED BY 40CFR433**

Use of this form is not an EPA/ADEQ requirement.

Attn: Water Div/NPDES Pretreatment

**(1) IDENTIFYING INFORMATION**

**A. LEGAL NAME & MAILING ADDRESS**

Southern Aluminum  
P.O. Box 884  
Magnolia, AR 71754

**B. FACILITY & LOCATION ADDRESS**

Southern Aluminum  
5 Highway 82 West  
Magnolia, AR 71753

**C. FACILITY CONTACT:** Colleen Tuggle

**TELEPHONE NUMBER:** 870.234.8660

**e-mail:** ctuggle@southernaluminum.com

**(2) REPORTING PERIOD--FISCAL YEAR 2010** (Both Semi-Annual Reports must cover Fiscal Year)

**A. MONTHS WHICH REPORTS ARE DUE**

June & December

**B. PERIOD COVERED BY THIS REPORT**

**FROM:** January 1, 2011

**TO:** June 30, 2011

**(3) DESCRIPTION OF OPERATION**

**A. REGULATED PROCESSES**

**CORE PROCESS(ES)**

CHECK EACH APPLICABLE BLOCK

- Electroplating
- Electroless Plating
- Anodizing
- Coating
- Chemical Etching and Milling
- Printed Circuit Board Manufacture

**ANCILLARY PROCESS(ES)\***

LIST BELOW EACH PROCESS USED IN THE FACILITY

Coating

Cleaning

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*SEE 40CFR433.10(a) FOR 40 DIFFERENT OPERATIONS

**B. CHANGES:**

SUMMARIZE ANY CHANGES IN THE REGULATED PROCESSES SINCE THE LAST REPORT. ATTACH AN ADDITIONAL SHEET IF THE SPACE BELOW IS INADEQUATE. PROVIDE A NEW SCHEMATIC IF APPROPRIATE.

**C. Number of Regular Employees at this Facility** 135

**D. [Reserved]**

**(4) FLOW MEASUREMENT**

INDIVIDUAL & TOTAL PROCESS FLOWS DISCHARGED TO POTW IN *GALLONS PER DAY*

Process	Average	Maximum	Type of Discharge
Regulated (Core & Ancillary)	15	15	Batch
Regulated (Cyanide)	0	0	N/A
§403.6(e) Unregulated*	0	0	N/A
§403.6(e) Dilute	0	0	N/A
Cooling Water**	0	0	N/A
Sanitary**	0	0	N/A
Total Flow to POTW	15	15	1350 Batch Discharge 4 Times Per Year

\*\*"Unregulated" has a precise legal meaning; see 40CFR403.6(c).

\*\*Indicate if these Streams commingle with Regulated Streams BEFORE treatment

(5) MEASUREMENT OF POLLUTANTS

A. TYPE OF TREATMENT SYSTEM

B. COMMENTS ON TREATMENT SYSTEM

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS OF THE EFFLUENT FROM ALL REGULATED PROCESSES-- CORE & ANCILLARY--(AFTER TREATMENT, IF APPLICABLE). ATTACH THE LAB ANALYSIS WHICH SHOWS A MAXIMUM; TABULATE ALL THE ANALYTICAL DATA COLLECTED DURING THE REPORT PERIOD IN THE SPACE PROVIDED BELOW. ZERO CONCENTRATIONS ARE NOT ACCEPTABLE; LIST THE DETECTION LIMIT IF CONCENTRATION WAS BELOW DETECTION LIMIT.

Pollutant(mg/l)	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CN	TTO*
Max for 1 day	0.11	2.77	3.38	0.69	3.98	0.43	2.61	1.20	2.13
Monthly Ave	0.07	1.71	2.07	0.43	2.38	0.24	1.48	0.65	--
Max Measured	0.002	0.002	0.033	0.0034	0.034	0.0005	0.552	0.0274	TOMP (N/A)
Ave Measured	0.002	0.0002	0.033	0.0034	0.034	0.0005	0.552	0.0274	TOMP (N/A)

Sample Location Sample taken at recently plumbed confluence of all three (3) regulated processes (Dip Tank, Wash Tank and Rinse Tank) immediately preceding discharge to municipal collection system.

Sample Type (Grab or Composite) Grab

Number of Samples and Frequency Collected One (1) collected 02-21-2011;

40 CFR 136 Preservation and Analytical Methods Use:  Yes  No

Indicate Combined Wastestream Factor if Dilution Streams Exist w/Regulated Streams N/A

(6) CERTIFICATION

A. Required under 40 CFR 403.12(g)

**(6) CERTIFICATION**

**A. Required under 40 CFR 403.12(g)**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Leon M. Ryan Vice President/General Manager

(Typed Name)

Leon Ryan  
(Corporate Officer or authorized representative)

Date of Signature 6 - 29 - 11

**B. CHECK ONE: '433.11(e)  TOXIC ORGANIC ANALYSIS ATTACHED     '433.12(a) TTO CERTIFICATION**

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to Arkansas Department of Environmental Quality.

Leon M. Ryan Vice President/General Manager

(Typed Name)

Leon Ryan  
(Corporate Officer or authorized representative)

Date of Signature 6 - 29 - 11

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*§6602 [42 U.S.C. 13101] Findings and Policy para (b) Policy.--The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.*

The User may list any new or ongoing Pollution Prevention practices: Initial submittal of a Toxic Organic Management Plan (TOMP).

**(8) GENERAL COMMENTS**

**Flow Calculations:**

Southern Aluminum batch discharges at a frequency of four (4) times per year. 1350 gallons are batch dumped to the Magnolia municipal sewer system once every three (3) month period.

**Calculations:**

Four (4) batch discharges X 1,350 gallons per discharge X 1 Year ÷ 365 days per year = 15 gallons per day (approximate)

**(9) SIGNATORY REQUIREMENTS [40CFR403.12(l)]**

I certify under penalty of law that I have personally examined and am familiar with the information in this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Leon M. Ryan  
NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

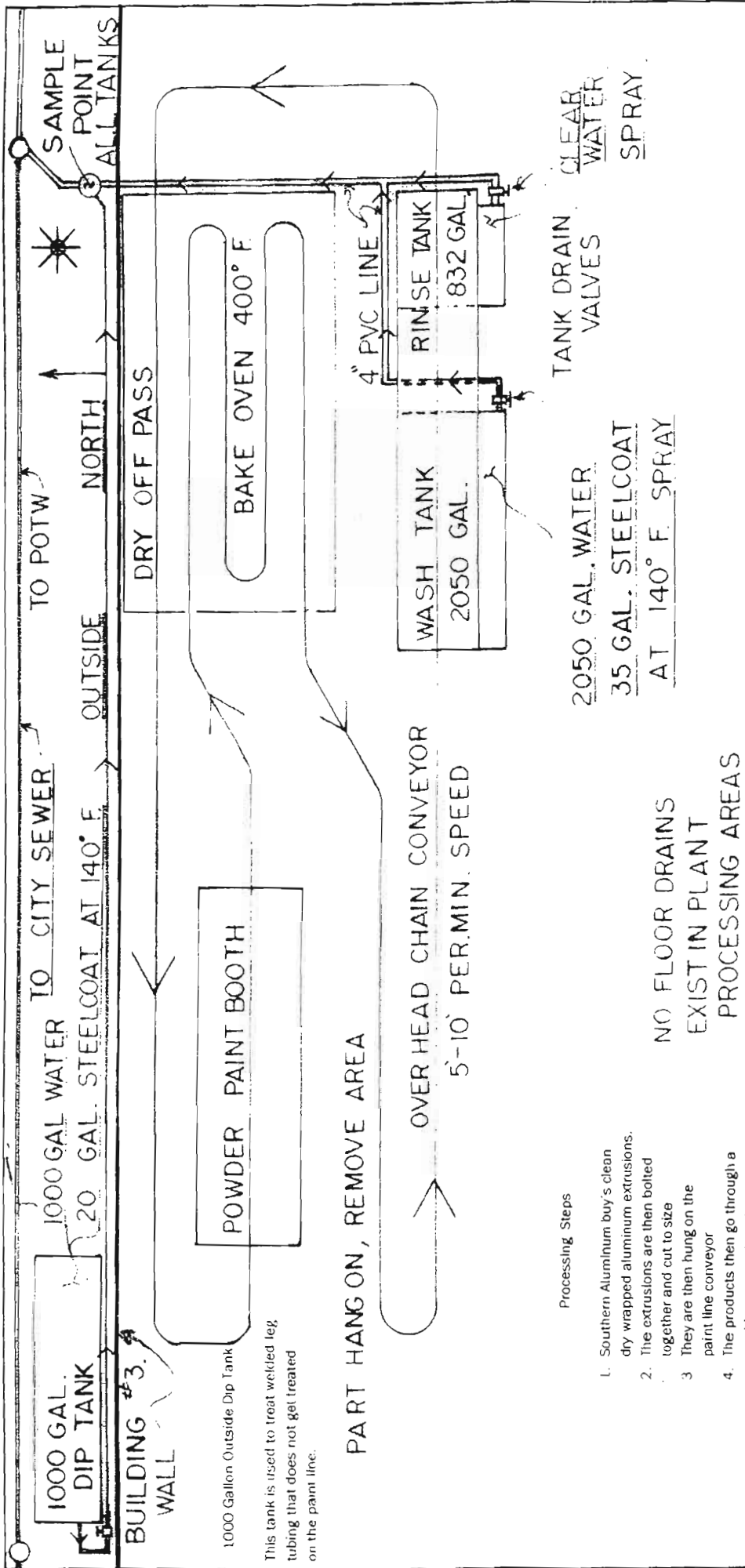
Leon Ryan  
SIGNATURE

Vice President/General Manager  
Leon Ryan V.P. Gen Mgr.  
OFFICIAL TITLE

6-29-11  
DATE SIGNED







<b>SOUTHERN ALUMINUM</b> HIGHWAY 82 WEST P.O. BOX 884 MAGNOLIA, ARKANSAS 71764 870-234-8600 1-800-221-0408	
CUSTOMER	STATE
CITY	CITY
PART NAME	PAINT LINE LAYOUT
CUSTOMER PART NO.	FINISH
DATE	10-5-10
SCALE	
CHK BY	LMR
FAB DWG NO.	

NO FLOOR DRAINS EXIST IN PLANT PROCESSING AREAS

NO CHEMICAL STORAGE IN PLANT PROCESSING AREAS

**Processing Steps**

1. Southern Aluminum buy's clean dry wrapped aluminum extrusions.
2. The extrusions are then bolted together and cut to size
3. They are then hung on the paint line conveyor
4. The products then go through a washing stage, then rinsed and placed inside the dry off oven.
5. The products are then sprayed with our powder paint and baked in the oven at 400° F.
6. Items are then removed from the paint line department and sent to assembly.

# Toxic Organic Management Plan (TOMP)

For Implementing Total Toxic Organics (TTO) Pretreatment Standards  
(40 CFR Part 433.11)

Southern Aluminum Company  
P.O. Box 884  
5 U.S. Highway 82 West  
Magnolia, AR 71754



Prepared by:

**Finch Environmental, PLC**

**9 Heritage Park Circle**

**North Little Rock, AR 72116**



## Toxic Organic Management Plan (TOMP)

Southern Aluminum Manufacturing, Inc

Page 2 of 10

**Narrative:** Southern Aluminum Manufacturing, Inc. is located at 5 U.S. Highway 82 West in the city of Magnolia, Arkansas. Under NAICS code 337124 the facility manufactures aluminum furniture.

Southern Aluminum purchases clean, dry wrapped Aluminum extrusions. Products undergo either of two (2) processes.

**Paint Line Process** (2050 gallon wash tank - Steelcote® and H<sub>2</sub>O at 140° F). 832 gallon rinse tank, powder paint booth, bake oven). Extrusions are bolted together and cut to size. Products are washed, rinsed and placed in a dry off oven at 400 degrees F. Extrusions are hung on the paint line conveyor and painted. Products are then removed and sent to assembly.

**Dip Process** (1000 gallon dip tank - Steelcote® and H<sub>2</sub>O at 140° F). Welded leg tubing that is not treated in the paint line process is dipped in a phosphatizing tank, dried, removed, and sent to assembly.

Contaminants are kept away from production areas to prevent paint defects. Sanitary sewer lines from restrooms are contained and piped using separate sewage discharge line with no open drains.

### **Building Design:**

There are no floor drains in the plant. All regulated process water sources are held in process tanks and transported by PVC lines (all clearly visible on plant floor) or by covered conveyances to a structure located on the north side of the building prior to discharge to the City of Magnolia municipal collection system.

### **Materials Used in Manufacturing and Process Description:**

Tables are made of dry wrapped Aluminum extrusions and fastened with galvanized fasteners.

**Toxic Organic Management Plan (TOMP)**

Southern Aluminum Manufacturing, Inc

Page 3 of 10



**Photograph of Dry-Wrapped Aluminum Extrusions Stored Inside Plant**

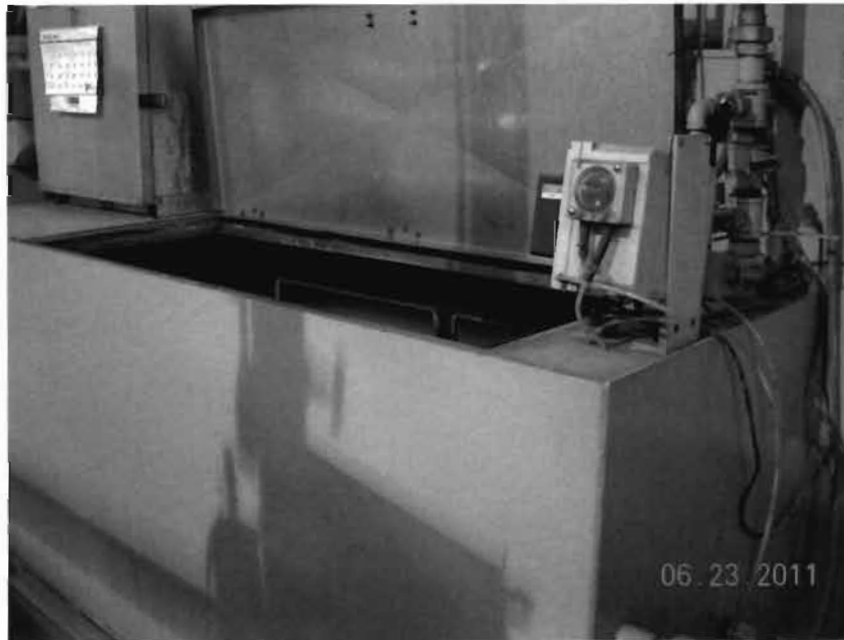


**Photograph of Intermediate Products Ready for Treatment**

Products undergo either of two (2) processes:

1. **Paint Line Process:** This process utilizes a 2050 gallon wash tank containing Steelcote® and H<sub>2</sub>O at 140°F followed by an 832 gallon rinse tank.
2. **Dip Process:** This process utilizes a 1000 gallon dip tank with Steelcote® and H<sub>2</sub>O at 140°F.

All process tanks are in excellent shape and are routinely checked for structural soundness.

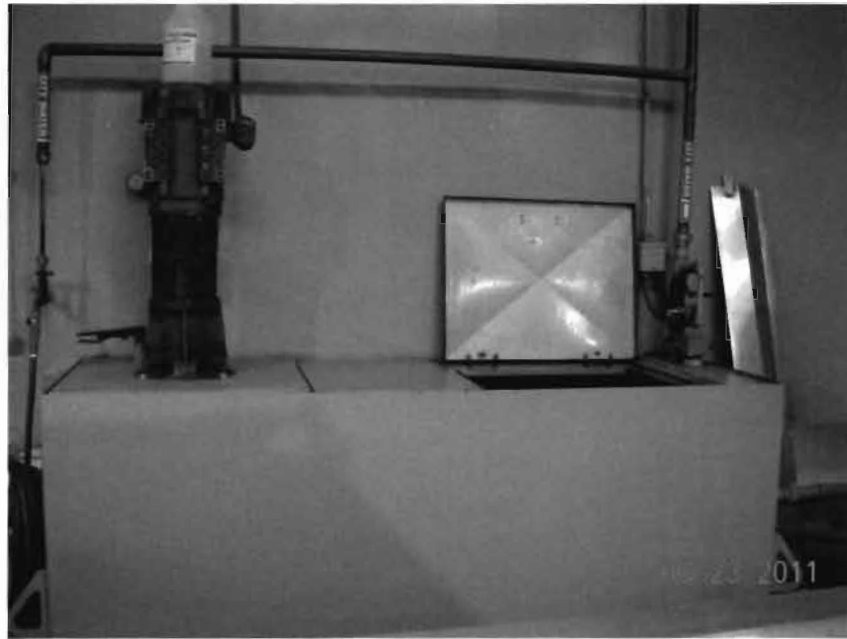


**Photograph of Paint Line Process Tank Located Inside Plant (Capacity: 2050 Gallons)**

**Toxic Organic Management Plan (TOMP)**

Southern Aluminum Manufacturing, Inc

Page 5 of 10



**Photograph of Paint Line Process Rinse Tank Located Inside Plant (Capacity: 832 Gallons)**



**Photograph of Dip Process Tank Located Under Cover (Capacity: 1000 Gallons)**

**Toxic Organic Management Plan (TOMP)**

Southern Aluminum Manufacturing, Inc

Page 6 of 10



**Photograph of Dry-Off Oven (Located Inside Plant)**



**Photograph of PVC Process Water Line Located on Plant Floor Clearly Visible For Inspection**

## Toxic Organic Management Plan (TOMP)

Southern Aluminum Manufacturing, Inc

Page 7 of 10



Photograph of Process Water Collection Fixture Where All Process Water Lines Commingle Prior to Entry into Municipal POTW - Located on North Side of Building



Photograph of Finished Product

Telephone/Fax: 501.771.6940

E-mail: [bkfinch@sbcglobal.net](mailto:bkfinch@sbcglobal.net)

[www.finchenvironmental.com](http://www.finchenvironmental.com)



## Toxic Organic Management Plan (TOMP)

Southern Aluminum Manufacturing, Inc

Page 8 of 10

### Summary:

A survey of the Southern Aluminum Plant and review of all Material Safety Data Sheets (MSDS) for products used at the plant revealed one (1) toxic organic (40 CFR 433.11(e)) in the product shown below. An evaluation of the product's usage was conducted and it was determined that this product cannot enter the waste stream which flows to the Publicly Owned Treatment Works (POTW). There are no floor drains at this plant and the material used has no contact with process water waste streams. A maximum of one (1) five gallon container of this material is in use in the process area at any given time. The plant supply of this material is kept in a secured security cabinet located inside the plant.

## Toxic Organic Management Plan (TOMP)

Southern Aluminum Manufacturing, Inc

Page 9 of 10

Material Used at Plant Containing Toxic Organic	
Material:	Wilsonart 800/801 Adhesive
Related Constituent:	Acetone; Toluene
Maximum Amount in Process Area:	5 Gallons
Storage Location/ Method:	Secured Steel Cabinet Located Inside Plant



Photograph of Steel Storage Cabinet


Telephone/Fax: 501.771.6940

E-mail: [bkfinch@sbcglobal.net](mailto:bkfinch@sbcglobal.net)

[www.finchenvironmental.com](http://www.finchenvironmental.com)

Certification:

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to Arkansas Department of Environmental Quality.



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Leon M. Ryan, Vice President, General Manager

6-29-11

Date Signed