

AG 011  
AG

**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

12/28/2012

*Complete / compliant  
No further action deemed  
necessary  
JTB*

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

Re: Southern Aluminum Company, Inc., Pretreatment Tracking Number ARP001059

Dear Mr. Gilliam,

Please accept this attached "Periodic Report" form as requested. Also included with this submittal is the laboratory analytical results and chain of custody form.

Please accept this submittal and contact me with questions.

Thank you.

Sincerely,

*B.K. F.*

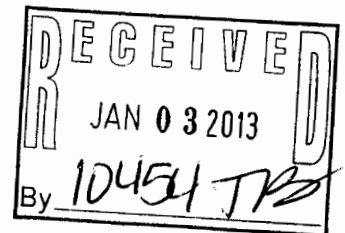
Bernie K. Finch  
Finch Environmental, PLC

*Leon Ryan*

Leon Ryan  
Southern Aluminum Company, Inc.

Attachment

Cc Russell Thomas, City of Magnolia



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

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

Attn: Water Div/NPDES Pretreatment

<b>(1) IDENTIFYING INFORMATION</b>	
<p><b>A. LEGAL NAME &amp; MAILING ADDRESS</b></p> <p>Southern Aluminum P.O. Box 884 Magnolia, AR 71754</p>	<p><b>B. FACILITY &amp; LOCATION ADDRESS</b></p> <p>Southern Aluminum 5 Highway 82 West Magnolia, AR 71753</p>
<p><b>C. FACILITY CONTACT:</b> Colleen Tuggle      <b>TELEPHONE NUMBER:</b> 870.234.8660      <b>e-mail:</b> ctuggle@southernaluminum.com</p>	
<b>(2) REPORTING PERIOD--FISCAL YEAR 2010 (Both Semi-Annual Reports must cover Fiscal Year)</b>	
<p><b>A. MONTHS WHICH REPORTS ARE DUE</b></p> <p><u>*This is a Periodic Batch Report</u></p>	<p><b>B. PERIOD COVERED BY THIS REPORT</b></p> <p><b>FROM:</b> December 12, 2012      <b>TO:</b> December 12, 2012</p>
<b>(3) DESCRIPTION OF OPERATION</b>	
<p><b>A. REGULATED PROCESSES</b></p> <p><u><b>CORE PROCESS(ES)</b></u></p> <p>CHECK EACH APPLICABLE BLOCK</p> <p><b>G</b> Electroplating <b>G</b> Electroless Plating <b>G</b> Anodizing <b>O</b> Coating <b>G</b> Chemical Etching and Milling <b>G</b> Printed Circuit Board Manufacture</p> <p><u><b>ANCILLARY PROCESS(ES)*</b></u></p> <p>LIST BELOW EACH PROCESS USED IN THE FACILITY</p> <p><u>Coating</u></p> <p><u>Cleaning</u></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p><b>B. CHANGES:</b>      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.</p>
<p><small>*SEE 40CFR433.10(a) FOR 40 DIFFERENT OPERATIONS</small></p>	
<p><b>C. Number of Regular Employees at this Facility</b> 135 <u>135</u></p>	<p><b>D. [Reserved]</b></p>

**(4) FLOW MEASUREMENT**

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

Process	Average	Maximum	Type of Discharge
Regulated (Core & Ancillary)	See Note Below	See Note Below	1832
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	See Note Below	See Note Below	1832

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

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

**(5) MEASUREMENT OF POLLUTANTS**

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	0.0001	0.001	0.037	0.004	0.007	0.0005	0.184	0.010	TOMP (N/A)
Ave Measured	0.0001	0.001	0.037	0.004	0.007	0.0005	0.184	0.010	TOMP (N/A)

Sample Location Sample taken at confluence of all regulated processes (Dip Tank and Rinse Tank) immediately preceding discharge to municipal collection system. Wash tank was not discharged on 12-12-2012.

Sample Type (Grab or Composite) Grab

Number of Samples and Frequency Collected One (1) collected 12-12-2012;

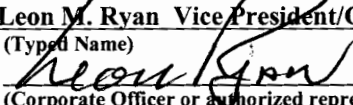
40 CFR 136 Preservation and Analytical Methods Use:  Yes  No

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

**(6) CERTIFICATION**

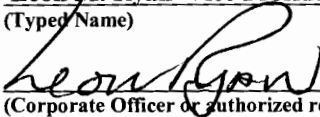
A. Required under 40 CFR 403.12(g)

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)  
  
(Corporate Officer or authorized representative)

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)  
  
(Corporate Officer or authorized representative)

Date of Signature 12-26-12

Intentionally left blank

*'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 discharged on December 12, 2012.

1000 gallons from Dip Tank (core process)

+

832 gallons from Rinse Tank (ancillary process)

= 1,832 gallons to the Magnolia municipal sewer system.

pH: 7.7 s.u.

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

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

  
SIGNATURE

Vice President/General Manager  
OFFICIAL TITLE

12-26-12  
DATE SIGNED

# Environmental Services Company, Inc.

Corporate Office  
 13715 West Markham  
 Little Rock, AR 72211  
 Tel. (501)221-2565 Fax (501)221-1341

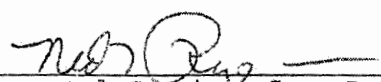
Northwest Arkansas Branch  
 1107 Century Avenue  
 Springdale, AR 72762  
 Tel. (479)750-1170 Fax (479)750-1172

Control Number: 1212010401	Sample Date : 12/12/12	Collected By: COLLEEN TUGGLE
Customer Name : SOUTHERN ALUMINUM CO., INC.	Sample Time : 1230	Delivery By : UPS
Customer Number : 2754	Sample Type : GRAB WATER	Work Order :
Report Date : 12/19/12	Sample From :	Purchase Order :

<u>Laboratory Analysis</u>							<u>Quality Assurance</u>		
<u>Analysis</u>							<u>Precision</u>	<u>Accuracy</u>	
<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>Method</u>	<u>% RPD</u>	<u>% Recovery</u>
12/14	1230	NTR	Cyanide Total (as CN)	< 0.0100			SM 18th 4500-CN E	1.43	98.3 *
12/12	1230	CT	pH	7.7	S.U.		SM 18 4500 H+B		
12/17	1106	RAH	Chromium	< 1.00			EPA 200.8	4.89	94.3 *
12/17	1106	RAH	Nickel	6.60			EPA 200.8	4.40	89.9 *
12/17	1106	RAH	Copper	37.30			EPA 200.8	0.71	90.0 *
12/17	1106	RAH	Zinc	184.00			EPA 200.8	11.87	83.5 *
12/17	1106	RAH	Silver	< 0.50			EPA 200.8	0.00	70.0 *
12/17	1106	RAH	Cadmium	< 0.10			EPA 200.8	1.62	70.6 *
12/17	1106	RAH	Lead	3.50			EPA 200.8	2.64	118.4 *

\* QA data shown is from a different sample or standard on the same date.

All equipment used is checked and/or calibrated daily. All NPDES testing is conducted in accordance with 40 CFR Part 136. A minimum of 10% spiked and duplicate samples is run on each parameter where applicable for Quality Assurance purposes. Quality Assurance Plan on file with Arkansas Department of Environmental Quality. Analysis time indicates the time of the start of the analytical batch in which the specific sample was included.

Signature   
 Environmental Services Co., Inc.

Environmental Services Company, Inc.  
 Corporate Office  
 13715 West Markham P.O. Box 55146  
 Little Rock, AR 72211 Little Rock, AR 72215  
 website: www.esclabs.com



Environmental Services Company, inc.  
 Northwest Branch  
 1107 Century  
 Springdale, AR 72764

Phone: 501-221-2565 Fax: 501-221-1341

### CHAIN OF CUSTODY

Phone 479-750-1170 Fax: 479-750-1172

Client Information				Project Information				Requested Parameters							
Company Name:		Southern Aluminum Co., Inc.		Permit/Project #:				Cyanide(g) Metals (See Comments)							
Address:		#5 Hwy 82 West Magnolia, AR 71753		Purchase Order #:											
Telephone:		800-221-0408		Work Order #:											
Fax:		870-234-4665		Sampler Name(s):		Colleen Tuggle Jeff Farnas C. Tuggle									
Contact:		Ms. Colleen Tuggle		and Signature(s):		[Signatures]									
ESC Client Number:		2754													
Sample Identification		Sample Collection			Sample Containers										
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#	Cyanide(g)	Metals (See Comments)				
	1212010401	12-12-12	12:30	Grab	Water	Plastic	1 Liter	NaOH+Ascorbic	1	X					
		12-12-12	12:30	Grab	Water	Plastic	1 Liter	HNO3 *	1	X					
Released By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Custody Seals:							
[Signature]		12-12-12	12:45	[Signature]				Used? <input type="checkbox"/> Intact? <input type="checkbox"/>							
Released By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name) via UPS		Date	Time	Turnaround:							
[Signature]		12-12-12	12:45	[Signature]		12-13-12	1030	Regular <input type="checkbox"/> Special <input type="checkbox"/>							
Released By: (Signature and Printed Name)		Date	Time	Received for Lab By: (Signature and Printed Name)		Date	Time	Were samples properly preserved:							
[Signature]		12-13-12	1100	[Signature]		12-13-12	1100	Yes <input type="checkbox"/> No <input type="checkbox"/>							
All samples cooled to ≤ 6 deg C with ice.						Flow Data	Field Test	Time	Analyst	Result	Result	Units			
Comments: Cd(48.PS), Cr(24.PS), Cu(29.PS), Pb(82.PS), Ni(28.PS), Ag(47.PS), Zn(30.PS)						Analyst:	pH: 7.9	12:30	C. Tuggle						
						Time:									
						Reading:									
						Units:									
* Per 40 CFR 136.3 Table II Note 19, samples preserved in laboratory.						Chlorinated? Y N	Fecal Start:			This Document is Page ___ of ___					

SOUTHERN ALUMINUM COMPANY

207



AGCHZ  
AG

**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

12/28/2012

*change of process notification*  
*AT*

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

Re: Southern Aluminum Company, Inc., Pretreatment Tracking Number ARP001059

Dear Mr. Gilliam,

This office is in receipt of your email, dated December 14, 2012 to Colleen Tuggle of Southern Aluminum Company (please see referenced Pretreatment Tracking Number) regarding compliance with pH limitations and requesting a description of the related change in process at the facility under 40 CFR § 403.12(j).

As you know Southern Aluminum periodically batch discharges from regulated core and ancillary processes to the City of Magnolia sanitary sewer collection system and are subject to federal metal finishing standards (40 CFR § 433.17) and municipal wastewater treatment regulations (limitations) regarding pH. To attain compliance with the limitation for pH imposed by the City of Magnolia, Southern Aluminum introduces, prior to batch discharges, an alkaline liquid mixture (Trade Name: WT 84, a product of the A Brite Company, please see attached MSDS).

The two (2) batch discharge scenarios employed at the plant require the following amounts of "WT 84":

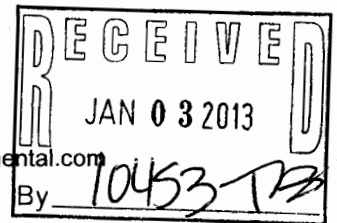
- 1. Wash Tank (core process, capacity: 2050 gallons) + Rinse Tank (ancillary process, capacity: 832 gallons)

**1.5 gallons**

- 2. Dip Tank (core process, capacity: 1000 gallons) + Rinse Tank (ancillary process, capacity: 832 gallons)

**2.0 gallons**

We have attained compliance with the limitation for pH and 40 CFR § 433.17 metals and cyanide during the last two (2) batch discharges, one on November 19, 2012 and the last one on December 12, 2012.



Please accept this submittal regarding the change in process as requested. Also included with this submittal is the Material Safety Data Sheet (MSDS) for the alkaline liquid ("WT 84") additive.

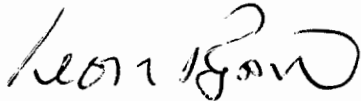
Please contact me with questions.

Thank you.

Sincerely,



Bernie K. Finch  
Finch Environmental, PLC



Leon M. Ryan  
Southern Aluminum Company, Inc.

Attachment

Cc Russell Thomas, City of Magnolia

# MATERIAL SAFETY DATA SHEET

COMPLIES WITH OSHA'S 29 CFR 1910, 1200 AND STATE HAZARD COMMUNICATION STANDARD

A BRITE COMPANY  
3217 WOOD DRIVE  
GARLAND, TEXAS 75041  
214-291-0400

24 HOUR EMERGENCY PHONE NUMBER 1-800-424-9300 (CHEMTREC)

## SECTION 1: PRODUCT IDENTIFICATION

TRADE NAME: WT 84  
GENERAL OR GENERIC ID: Alkaline liquid mixture  
DATE PREPARED: 5/19/04  
LATEST REVISION DATE: 5/19/04  
NFPA/HMIS HAZARD CODES  
(minimal = 0; slight = 1; moderate = 2; serious = 3; severe = 4)  
HEALTH: 3/3 FIRE: 0/0 REACTIVITY: 1/1 SPECIAL: H

## SECTION 2: HAZARDOUS INGREDIENTS IDENTITY INFORMATION

HAZARDOUS COMPONENTS	CAS #	OSHA PEL	ACGIH TLV	IDLH LEVEL	% WT
Sodium Hydroxide	310-73-2	2mg/m <sup>3</sup>	2mg/m <sup>3</sup>	250mg/m <sup>3</sup>	<55

\*= Reportable under SARA Title III

## SECTION 3: PHYSICAL/CHEMICAL CHARACTERISTICS

**BOILING POINT:** >212°F  
**VAPOR PRESSURE:** N/A  
**SOLUBILITY IN WATER:** Complete  
**pH (1% Solution):** 12  
**APPEARANCE AND COLOR:** Clear liquid with no distinguishable odor.

**SPECIFIC GRAVITY:** 1.50  
**VAPOR DENSITY:** N/A  
**EVAPORATION RATE:** N/A

## SECTION 4: FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT:** not flammable  
**EXTINGUISHING MEDIA:** Water fog, carbon dioxide, alcohol foam, dry chemical and Halon.  
**SPECIAL FIRE FIGHTING PROCEDURES:** Pressure demand, self contained respiratory protection and protective clothing should be worn by firefighters in areas where products containing caustic soda or caustic soda mixtures are stored.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Non combustible material, liquid form in contact with water may generate sufficient heat to ignite combustible or flammable materials. Contact with white metals such as zinc, aluminum, tin or alloys of these metals can generate explosive hydrogen gas.

## SECTION 5: REACTIVITY DATA

**STABILITY:** Stable  
**HAZARDOUS POLYMERIZATION:** Will not occur  
**INCOMPATIBILITY:** Acids, metals such as zinc, aluminum, tin or alloys of these metals. Flammable liquids, organic halogens, nitromethane or nitro compounds.  
**CONDITIONS TO AVOID:** Splashing or dropping of water or strong acids on product. Spilling of liquid product on white metals.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon dioxide and or carbon monoxide or hydrogen gas may evolve.

## SECTION 6: HEALTH HAZARD DATA

**ROUTES OF ENTRY /SIGNS AND SYMPTOMS OF EXPOSURE:**  
**ACUTE:** Corrosive to eyes and skin, concentrated solutions may des tissue on contact. Can cause blindness.  
**INGESTION:** Harmful if swallowed. Can cause severe burns and comp perforation of mucous membranes to the mouth, throat, esophagus, stomach if swallowed.  
**INHALATION:** Mist or dust at high levels may cause irritation to the nc throat and lungs. May cause damage to the upper respiratory tract.  
**CHRONIC EFFECTS:** None known  
**CARCINOGENS:** None under OSHA, IARC or NTP.  
**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** None known.  
**EMERGENCY AND FIRST AID PROCEDURES:**  
**EYES:** Immediately flush with plenty of water for 15 minutes. See physician.  
**SKIN:** Wash with soap and water. Remove contaminated clothing. See physician if irritation occurs.  
**INHALATION:** Remove to fresh air. If breathing has stopped start artifi respiration. See a physician.  
**INGESTION:** Call a physician immediately, **DO NOT INDUCE VOMIT!**  
**DILUTE BY DRINKING WATER (MILK IF AVAILABLE) NEVER GI LIQUIDS TO AN UNCONSCIOUS PERSON.**

## SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

**SPILL OR LEAK PROCEDURES:**  
**SMALL SPILLS:** Flush to treatment system with large amounts of water.  
**LARGE SPILLS:** Sweep into suitable containers. Keep out of fish bear waters.  
**WASTE DISPOSAL METHOD:** Dump to waste water treatment syst observe local, state and federal regulations. Product is hazardous wa: EPA Code (c,R), EPA Hazardous Waste Numbers D002, D003, due to pl

## SECTION 8: TRANSPORTATION AND LABELING

**REGULATORY INFORMATION:**  
**DOT HAZARD CLASS:** 8  
**SHIPPING NAME:** Sodium hydroxide solution  
**ID NUMBER:** UN 1824  
**PACKING GROUP:** II  
**LABELS:** 8  
**TSCA:** All components included in the inventory.

## SECTION 9: HANDLING AND STORAGE

**HANDLING AND STORING:** Keep container closed when not in use.  
**OTHER PRECAUTIONS:** Keep out of reach of children. Store in pri chemical storage area.  
If water pollution occurs, notify the proper authorities.

## SECTION 10: CONTROL MEASURES

**RESPIRATORY PROTECTION:** Use NIOSH approved respiro equipment for dust and mist.  
**VENTILATION:** Local exhaust to maintain air contamination below TLV li  
**GLOVES:** Rubber gloves, neoprene, or synthetic rubber required.  
**EYE PROTECTION:** Safety glasses or goggles required.  
**OTHER PROTECTIVE EQUIPMENT:** As needed to prevent prolonge repeated skin contact. Eye wash fountain and safety shower in work area  
**WORK /HYGIENIC PRACTICES:** Launder contaminated clothing be reuse.

THE INFORMATION WAS COMPILED FROM CURRENT, RELIABLE SOUR AND IS BELIEVED TO BE CORRECT. AS DATA, AND OR REGULATI CHANGE, AND CONDITION OF USE AND HANDLING ARE BEYOND ( CONTROL, NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMAT SELLER ASSUMES NO RESPONSIBILITY FOR INJURY TO BUYER OR THIRD PERSONS OR FOR ANY DAMAGE TO ANY PROPERTY AND BU ASSUMES ALL SUCH RISKS.