

Gage, Hannah

From: Gilliam, Allen
Sent: Tuesday, April 12, 2016 12:13 PM
To: 'Crews, Joe'; 'jrausch@reawire.com'
Cc: Gage, Hannah; McWilliams, Clark; 'bhaynes58@yahoo.com'
Subject: AR0021580_Rea Wire ARP000020 March 2016 Semi Annual Monitoring Report compliance indeterminate_20160412
Attachments: ScaNovaCopy16032409260.pdf

Joseph,

Rea Magnet Wire's March 2016 semi-annual report was electronically received and reviewed.

Compliance with the Federally regulated wastestreams (40 CFRs 467 and 468) cannot be determined based on "cooling water¹" is "The batch discharges are comprised of several regulated and diluted streams". There is no calculation shown taking into account the amount of dilution water that contributes to the regulated wastestream(s).

This has been an ongoing source of confusion since your previous State Pretreatment coordinator retired. This office can believe Rea is in compliance simply because of its minute discharge over its six month reporting period and the sheer amount of production during the same time period.

The production based standards under CFRs 467 and 468 converted to alternative mass limitations do not show the use of the combined wastestream per 40 CFR 403.6(e)(1)(ii); thence to the equivalent concentration limitations you're comparing lab analysis to for compliance.

The boxed note on page 7 of your wastewater schematic, "403.6(d) Dilution is not applicable to facilities with only production based-based streams" is not correct and should be removed. This report even refers to "Summary of Calculated Equivalent Concentration Limits for Pond Discharges, mg/L (considering dilution)" on page 9(?) with a table of Rea's production history.

It may be just that one missing link (a mathematical calculation) that shows the use of a dilution factor to further substantiate compliance. This office cannot link the table above it to the one referenced above.

The table in Section (4), "B. Individual Process Wastestreams Discharged to POTW" has been greatly cleared up as well as the wastewater flow schematic over the past two years. This office greatly appreciates your patience and understanding why these needed to be clarified.

To further simplify your reports, could the "not in use" processes on pages 2 and 3 and the wastewater flow schematic be removed in future reports?

Again, this office appreciates your patience and understanding as I have not visited Rea nor have any baseline information from your previous State Coordinator to work with to fully understand all of Rea's active/intermittently active/no longer active processes.

Respectfully,

Allen Gilliam
ADEQ State Pretreatment Coordinator
501.682.0625

cc: Brandon Haynes, Osceola Water and Wastewater Superintendent

E/NPDES/NPDES/Pretreatment/Reports

-----Original Message-----

From: Crews, Joe [<mailto:jcrews@reawire.com>]

Sent: Thursday, March 24, 2016 9:40 AM

To: Gilliam, Allen

Subject: Rea Semi Annual Monitoring Report

Allen,

I apologize about not getting this to you last week. Attached is report and I will put in mail today.

Joseph Crews

Human Resources/Safety Manager

Rea Magnet Wire Company

1800 S US Highway 61

Osceola, AR 72370

870-622-4404

jcrews@reawire.com

Algonquin Industries Division
1800 Highway 61 South
Osceola, AR 72370

Tel (870) 563-5207
Fax (870) 563-1207



Algonquin Industries Division

Osceola Plant

March 14, 2015

Mr. Allen Gilliam
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

**Re: Semi-Annual Wastewater Monitoring Report
Rea Magnet Wire Company, Inc. — Algonquin Industries Division
Osceola, Arkansas Plant**

Dear Mr. Gilliam:

Please find enclosed the semi-annual wastewater monitoring report for the September 2015 — February 2016 monitoring period including a flow schematic, copies of the analytical results of the sampling, and a process description for the facility. Note that limitations for batch discharges were calculated using the production data from a specific time period beginning with the date of the most recent batch discharge and ending with the date the samples (reported herein) were collected. A spreadsheet containing updated limitation calculations for the discharges from the facility will accompany the electronic submittal of this report.

If you need any additional information, please contact Joe Crews at (870) 622-4404 or by email at jcrews@reawire.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Rausch', with a long horizontal flourish extending to the right.

By: John Rausch
*Plant Manager, Osceola Plant
Rea Magnet Wire Company, Inc.*

Enclosures

cc: James Carlock, Superintendent
Osceola Water Department
PO Box 443
Osceola, Arkansas 72370



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Tax I.D. 62-0814289

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Geoff Pope
Ensafe
5724 Summer Trees Drive
Memphis, TN 38134

Report Summary

Wednesday February 17, 2016

Report Number: L814931

Samples Received: 02/02/16

Client Project: 0888818277/003

Description: Osceola, AR

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Pam Langford , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01,1461-02, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIC041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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REPORT OF ANALYSIS

Geoff Pope
Ensafe
5724 Summer Trees Drive
Memphis, TN 38134

February 17, 2016

Date Received : February 02, 2016
Description : Osceola, AR

ESC Sample # : L814931-01

Sample ID : POND

Site ID :

Collected By : Eric Tidquist
Collection Date : 02/01/16 11:20

Project # : 0888818277/003

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cyanide	BDL	0.00500	mg/l	4500CN E-2011	02/05/16	1
Chromium, Hexavalent	BDL	0.0100	mg/l	3500Cr B-2011	02/02/16	1
Oil & Grease (Hexane Extr)	BDL	5.49	mg/l	1664A	02/08/16	1
Copper	0.0285	0.0100	mg/l	200.7	02/02/16	1
Lead	BDL	0.00500	mg/l	200.7	02/02/16	1
Nickel	BDL	0.0100	mg/l	200.7	02/02/16	1
Zinc	BDL	0.0500	mg/l	200.7	02/02/16	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 02/08/16 17:11 Revised: 02/17/16 15:19



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REPORT OF ANALYSIS

Geoff Pope
Ensafe
5724 Summer Trees Drive
Memphis, TN 38134

February 17, 2016

Date Received : February 02, 2016
Description : Osceola, AR

ESC Sample # : L814931-02

Sample ID : DCA

Site ID :

Collected By : Eric Tidquist
Collection Date : 02/01/16 11:40

Project # : 0888818277/003

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cyanide	0.0126	0.00500	mg/l	4500CN E-2011	02/05/16	1
Chromium, Hexavalent	BDL	0.0100	mg/l	3500Cr B-2011	02/02/16	1
Oil & Grease (Hexane Extr)	7.18	5.88	mg/l	1664A	02/08/16	1
Copper	0.845	0.0100	mg/l	200.7	02/02/16	1
Zinc	0.173	0.0500	mg/l	200.7	02/02/16	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 02/08/16 17:11 Revised: 02/17/16 15:19

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L814931-01	WG846329	SAMP	Copper	R3110592	B

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
B	(EPA) - The indicated compound was found in the associated method blank as well as the laboratory sample.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.



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 Geoff Pope
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Quality Assurance Report
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February 17, 2016

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Chromium, Hexavalent	< .01	mg/l			WG846333	02/02/16 11:08
Copper	< .01	mg/l			WG846329	02/02/16 15:43
Lead	< .005	mg/l			WG846329	02/02/16 15:43
Nickel	< .01	mg/l			WG846329	02/02/16 15:43
Zinc	< .05	mg/l			WG846329	02/02/16 15:43
Cyanide	< .005	mg/l			WG846692	02/05/16 08:36
Oil & Grease (Hexane Extr)	< 5	mg/l			WG847644	02/08/16 15:44

Analyte	Units	Result	Duplicate		Limit	Ref Samp	Batch
			Duplicate	RPD			
Chromium, Hexavalent	mg/l	0.00	0.00	0.00	20	L814931-01	WG846333
Cyanide	mg/l	0.00	0.00334	0.00	20	L814899-02	WG846692
Cyanide	mg/l	0.00	-0.00214	0.00	20	L815192-02	WG846692

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Chromium, Hexavalent	mg/l	.6	0.570	95.0	85-115	WG846333
Copper	mg/l	1	0.978	98.0	85-115	WG846329
Lead	mg/l	1	1.06	106.	85-115	WG846329
Nickel	mg/l	1	1.00	100.	85-115	WG846329
Zinc	mg/l	1	0.998	100.	85-115	WG846329
Cyanide	mg/l	.1	0.107	107.	90-110	WG846692
Oil & Grease (Hexane Extr)	mg/l	40	38.0	95.0	78-114	WG847644

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Chromium, Hexavalent	mg/l	0.570	0.570	95.0	85-115	0.00	20	WG846333
Copper	mg/l	0.987	0.978	99.0	85-115	1.00	20	WG846329
Lead	mg/l	1.07	1.06	106.	85-115	1.00	20	WG846329
Nickel	mg/l	1.01	1.00	101.	85-115	1.00	20	WG846329
Zinc	mg/l	1.01	0.998	101.	85-115	1.00	20	WG846329
Cyanide	mg/l	0.102	0.107	102.	90-110	5.00	20	WG846692
Oil & Grease (Hexane Extr)	mg/l	38.9	38.0	97.0	78-114	2.34	20	WG847644

* Performance of this Analyte is outside of established criteria.
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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February 17, 2016

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Chromium, Hexavalent	mg/l	0.500	0.00	.5	100.	85-115	L814931-01	WG846333
Copper	mg/l	0.982	0.00169	1	98.0	75-125	L814907-02	WG846329
Lead	mg/l	1.09	0.00795	1	108.	75-125	L814907-02	WG846329
Nickel	mg/l	1.05	0.00136	1	104.	75-125	L814907-02	WG846329
Zinc	mg/l	1.02	0.0127	1	100.	75-125	L814907-02	WG846329
Copper	mg/l	1.04	-0.00188	1	104.	75-125	L814925-01	WG846329
Lead	mg/l	1.08	-0.000324	1	108.	75-125	L814925-01	WG846329
Nickel	mg/l	1.06	0.00127	1	106.	75-125	L814925-01	WG846329
Zinc	mg/l	1.01	0.00159	1	101.	75-125	L814925-01	WG846329
Cyanide	mg/l	0.193	0.00486	.2	94.0	90-110	L814926-02	WG846692
Oil & Grease (Hexane Extr)	mg/l	20.4	2.96	40	43.6*	78-114	L814255-02	WG847644

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Chromium, Hexavalent	mg/l	0.501	0.500	100.	85-115	0.200	20	L814931-01	WG846333
Copper	mg/l	0.970	0.982	96.8	75-125	1.00	20	L814907-02	WG846329
Lead	mg/l	1.08	1.09	108.	75-125	0.00	20	L814907-02	WG846329
Nickel	mg/l	1.04	1.05	104.	75-125	0.00	20	L814907-02	WG846329
Zinc	mg/l	1.02	1.02	101.	75-125	0.00	20	L814907-02	WG846329
Copper	mg/l	1.04	1.04	104.	75-125	1.00	20	L814925-01	WG846329
Lead	mg/l	1.08	1.08	108.	75-125	0.00	20	L814925-01	WG846329
Nickel	mg/l	1.06	1.06	106.	75-125	0.00	20	L814925-01	WG846329
Zinc	mg/l	1.01	1.01	100.	75-125	0.00	20	L814925-01	WG846329
Cyanide	mg/l	0.190	0.193	92.6	90-110	2.00	20	L814926-02	WG846692
Oil & Grease (Hexane Extr)	mg/l	21.4	20.4	46.2*	78-114	4.88	18	L814255-02	WG847644

Serial Dilution

Batch number /Run number / Sample number cross reference

WG846333: R3110440: L814931-01 02
WG846329: R3110592: L814931-01 02
WG846692: R3111294: L814931-01 02
WG847644: R3111874: L814931-01 02

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

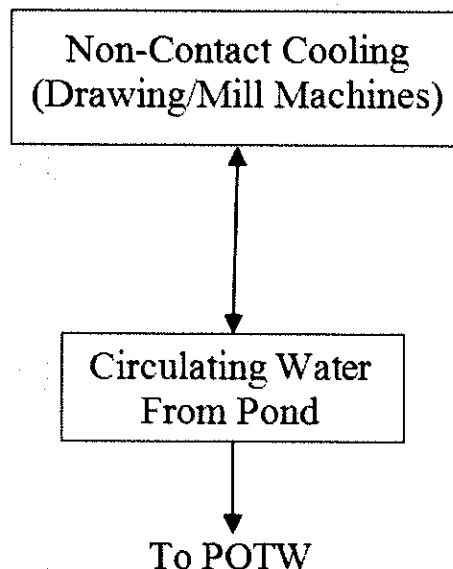
Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Semi-Annual Wastewater Monitoring Report Wastewater Process Description

At its Osceola, Arkansas plant, Rea – Algonquin Industries Division manufactures specialty aluminum and copper wire products.

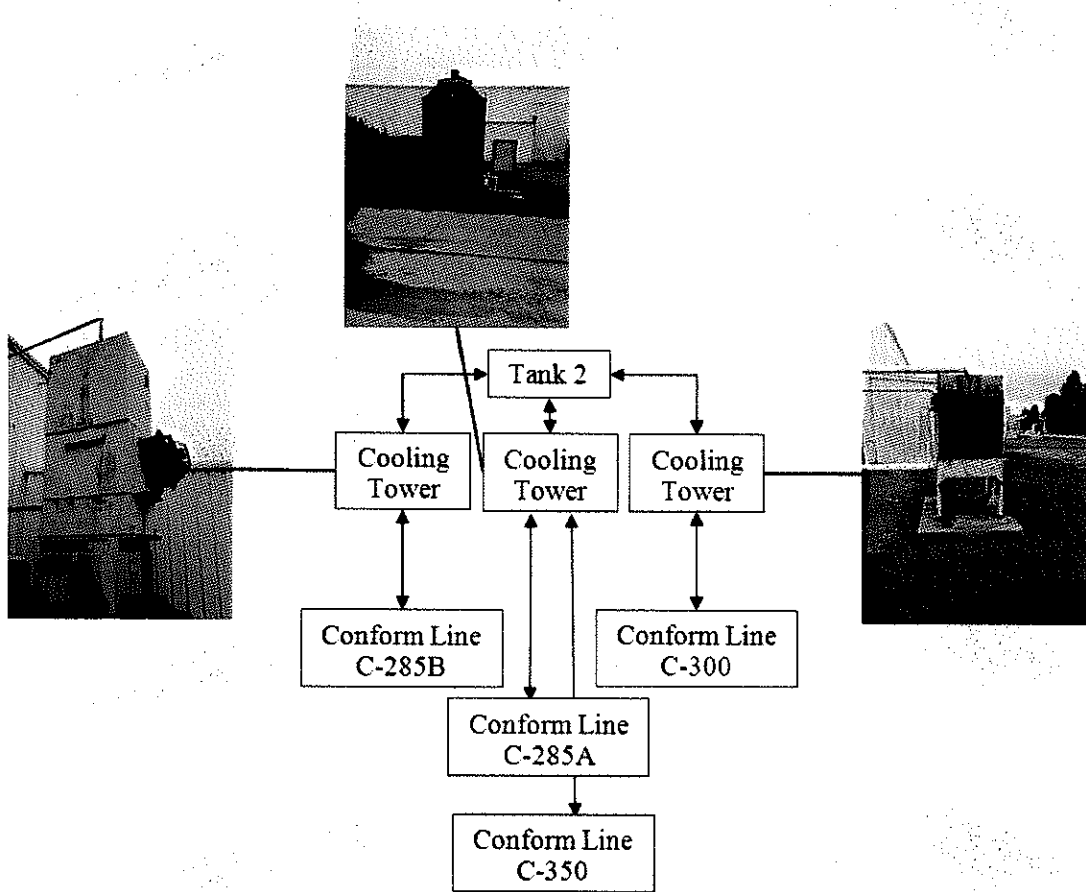
Drawing and Milling

Non-contact cooling water is used in the drawing and milling processes at the facility. The non-contact cooling water is recirculated to the pond. It is possible for the pond to discharge to the City of Osceola Publicly Owned Treatment Works (POTW), but this is typically only necessary when the pond or associated recirculation equipment requires maintenance.



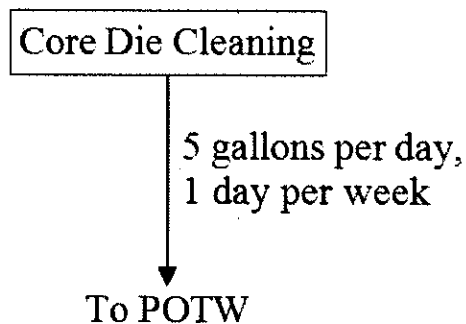
Copper and Aluminum Conform Processes

The copper and aluminum conform lines (C-285A, C-285B, C-300, and C-350) generate wastewater, which recirculates between the conform process equipment and three cooling towers as shown below. Each wastewater line can be pumped into Tank 2, which is periodically pumped out by a waste contractor who ships the wastewater offsite. Wastewater from the copper and aluminum conform lines is not discharged to the City of Osceola POTW.



Die Cleaning Process

Dies are periodically soaked in caustic solution for cleaning. When they are done soaking, they are rinsed off using clean tap water over a sink. The rinse water discharges to the City of Osceola POTW. The estimated discharge flow rate is five gallons per die cleaning event, and the estimated frequency of die cleaning events is once per week.



Other Wastewater Streams

Other wastewater streams that discharge to the City of Osceola POTW include:

- Sanitary waste;
- Air compressor condensate blowdown; and
- Water from the steam clean forklift wash area

SEMI-ANNUAL REPORT FOR USERS REGULATED BY THE Al & Cu FORMING CATEGORIES

ATTN: Water Div/NPDES Pretreatment

(1) IDENTIFYING INFORMATION																												
<p>A. LEGAL NAME & MAILING ADDRESS</p> <p style="margin-left: 40px;">Rea – Algonquin Industries Division 1800 Highway 61 South Osceola, AR 72370</p>	<p>B. FACILITY & LOCATION ADDRESS</p> <p style="margin-left: 40px;">Rea – Algonquin Industries Division 1800 Highway 61 South Osceola, AR 72370</p>																											
<p>C. FACILITY CONTACT: John Rausch (jrausch@reawire.com) TELEPHONE NUMBER: 870-622-4413</p>																												
(2) REPORTING PERIOD--FISCAL YEAR																												
<p>2015 & 2016</p>																												
<p>A. MONTHS WHICH REPORTS ARE DUE</p> <p style="margin-left: 40px;">September & March</p>	<p>B. PERIOD COVERED BY THIS REPORT</p> <p style="margin-left: 40px;">FROM: September 1, 2015 – February 29, 2016</p>																											
(3) DESCRIPTION OF OPERATION																												
<p>A. Regulated Processes per 40 CFR Part 467 (Aluminum) Subpart A & C and 40 CFR Part 468 (Copper) Subpart A</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left; padding: 5px;">PROCESS</th> <th style="text-align: center; padding: 5px;">PRODUCTION- OFF/LB</th> <th style="text-align: center; padding: 5px;">PRODUCTION DAYS</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Rolled Aluminum (§467.15 Solution Heat Treatment)</td> <td style="text-align: center; padding: 5px;">0</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> <tr> <td style="padding: 5px;">Extruded Aluminum (§467.35 Core Die Cleaning)</td> <td style="text-align: center; padding: 5px;">1,949,480</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> <tr> <td style="padding: 5px;">Extruded Aluminum (§467.35 Press Heat Treatment) C300</td> <td style="text-align: center; padding: 5px;">0</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> <tr> <td style="padding: 5px;">(§467.35 Press Heat Treatment) C350</td> <td style="text-align: center; padding: 5px;">0</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> <tr> <td style="padding: 5px;">Rolled Copper (§468.14(d) Solution Heat Treatment)</td> <td style="text-align: center; padding: 5px;">0</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> <tr> <td style="padding: 5px;">Extruded Copper (§468.14(k) Pickling Rinse) C285</td> <td style="text-align: center; padding: 5px;">3,133,996</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> <tr> <td style="padding: 5px;">(§468.14(m) Pickling Bath) C285</td> <td style="text-align: center; padding: 5px;">3,133,996</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> <tr> <td style="padding: 5px;">(§468.14(e) Extrusion Heat Treatment) C285</td> <td style="text-align: center; padding: 5px;">3,133,996</td> <td style="text-align: center; padding: 5px;">9/1/2015-2/29/2016 182 days</td> </tr> </tbody> </table>	PROCESS	PRODUCTION- OFF/LB	PRODUCTION DAYS	Rolled Aluminum (§467.15 Solution Heat Treatment)	0	9/1/2015-2/29/2016 182 days	Extruded Aluminum (§467.35 Core Die Cleaning)	1,949,480	9/1/2015-2/29/2016 182 days	Extruded Aluminum (§467.35 Press Heat Treatment) C300	0	9/1/2015-2/29/2016 182 days	(§467.35 Press Heat Treatment) C350	0	9/1/2015-2/29/2016 182 days	Rolled Copper (§468.14(d) Solution Heat Treatment)	0	9/1/2015-2/29/2016 182 days	Extruded Copper (§468.14(k) Pickling Rinse) C285	3,133,996	9/1/2015-2/29/2016 182 days	(§468.14(m) Pickling Bath) C285	3,133,996	9/1/2015-2/29/2016 182 days	(§468.14(e) Extrusion Heat Treatment) C285	3,133,996	9/1/2015-2/29/2016 182 days	<p>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.</p>
PROCESS	PRODUCTION- OFF/LB	PRODUCTION DAYS																										
Rolled Aluminum (§467.15 Solution Heat Treatment)	0	9/1/2015-2/29/2016 182 days																										
Extruded Aluminum (§467.35 Core Die Cleaning)	1,949,480	9/1/2015-2/29/2016 182 days																										
Extruded Aluminum (§467.35 Press Heat Treatment) C300	0	9/1/2015-2/29/2016 182 days																										
(§467.35 Press Heat Treatment) C350	0	9/1/2015-2/29/2016 182 days																										
Rolled Copper (§468.14(d) Solution Heat Treatment)	0	9/1/2015-2/29/2016 182 days																										
Extruded Copper (§468.14(k) Pickling Rinse) C285	3,133,996	9/1/2015-2/29/2016 182 days																										
(§468.14(m) Pickling Bath) C285	3,133,996	9/1/2015-2/29/2016 182 days																										
(§468.14(e) Extrusion Heat Treatment) C285	3,133,996	9/1/2015-2/29/2016 182 days																										
<p>C. Number of Regular Employees at this Facility: <u>51</u></p>	<p>D. [Reserved]</p>																											

(4) FLOW MEASUREMENT

B. INDIVIDUAL PROCESS WASTESTREAMS DISCHARGED TO POTW

Operation	Average Flow Rate (gpd)	Number of Discharge Days	Batch Discharge Volume	Type of Discharge
Process:				
§467.15 Solution Heat Treatment (Aluminum Rolling)	NA	NA	Tagged out – not in use	Zero discharge during this monitoring period
§467.35 Cleaning or Etching Rinse (Aluminum Extrusion)	NA	NA	Not in service	NA
§467.35 Cleaning or Etching Bath (Aluminum Extrusion)	NA	NA	Not in service	NA
§468.14(m) Pickling Bath (Copper Extrusion)	25.98	182	2,698 gallons shipped offsite Nov. 3, 2015; 245 lbs (approx. 30 gal) shipped offsite Dec. 17, 2015; 2,000 gallons shipped offsite Feb. 2, 2016	Zero discharge during this monitoring period
§468.14(k) Pickling Rinse (Copper Extrusion)	25.98	182	2,698 gallons shipped offsite Nov. 3, 2015; 245 lbs (approx. 30 gal) shipped offsite Dec. 17, 2015; 2,000 gallons shipped offsite Feb. 2, 2016	Zero discharge during this monitoring period
§468.14(e) Extrusion Heat Treatment (Copper Extrusion)	25.98	182	2,698 gallons shipped offsite Nov. 3, 2015; 245 lbs (approx. 30 gal) shipped offsite Dec. 17, 2015; 2,000 gallons shipped offsite Feb. 2, 2016	Zero discharge during this monitoring period
§467.35 Core-Die Cleaner (Aluminum Extrusion)	5 (estimate)	26 (estimate)	Estimated discharge rate of 5 gallons per die cleaning event and estimated frequency of one die cleaning event per week	Intermittent
§467.35 Press Heat Treatment (Aluminum Extrusion)	25.98	182	2,698 gallons shipped offsite Nov. 3, 2015; 245 lbs (approx. 30 gal) shipped offsite Dec. 17, 2015; 2,000 gallons shipped offsite Feb. 2, 2016	Zero discharge during this monitoring period
§468.14(d) Solution Heat Treatment (Copper Forming [Rolling])	NA	NA	Not in service	NA
§403.6(e) Unregulated:				
Air compressor condensate blowdown	10 (estimate)	144	NA	Intermittent
Steam clean forklift wash area	5 (estimate)	144	NA	Intermittent
§403.6(e) Dilute:				
Cooling water ¹	280.22	182	Three batches (approx. 15,000 gallons each) discharged to the POTW on Sept. 2, 2015, Nov. 11, 2015, Dec. 17, 2015; 6,000 gallons shipped offsite Sept. 5, 2015	Batch discharge from recirculation pond
Sanitary	6,000 (estimate)	144	NA	Continuous

¹The batch discharges are comprised of several regulated and diluted source waters.

(5) MEASUREMENT OF POLLUTANTS

A. TYPE OF TREATMENT SYSTEM CHECK EACH APPLICABLE BLOCK

- Neutralization
- Chemical Precipitation and Sedimentation
- Chromium Reduction
- Cyanide Destruction
- Other _____
- None

B. COMMENTS ON TREATMENT SYSTEM

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS ON 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.

Concentrations (mg/l)	Cr	Cu	Pb	Ni	Zn	TTO	O&G	CN
C-500 Cooling Water Tank (Aluminum Extrusion) Allowable Concentrations	NA	NA	NA	NA	NA	NA	NA	NA
C-500 Cooling Water Tank Measured Concentrations	NA	NA	NA	NA	NA	NA	NA	NA
C-300 Cooling Water Tank (Aluminum Extrusion) Allowable Concentrations	NA	NA	NA	NA	NA	NA	NA	NA
C-300 Cooling Water Tank Measured Concentrations	NA	NA	NA	NA	NA	NA	NA	NA
Die Cleaning Allowable Concentrations ¹	47 19.2	NA	NA	NA	154 66.2	NA	5673 2774	31 12.6
Die Cleaning Measured Concentrations	<0.01	NA	NA	NA	0.173	NA	7.18	0.0126
Pond Allowable Concentration	0.760	3.294	0.423	4.181	2.580	NA	63.728	0.114
Pond Measured Concentration	<0.01	0.0285	<0.005	<0.01	<0.05	NA	<5.49	<0.005
C-350 Aluminum Extrusion Tank 1 (Cleaning or Etching Bath)	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Aluminum Extrusion Tank 1 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Aluminum Extrusion Tank 2 (Cleaning or Etching Rinse)	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Aluminum Extrusion Tank 2 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Aluminum Extrusion Tank 3 (Cleaning or Etching Rinse)	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Aluminum Extrusion Tank 3 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Aluminum Extrusion Tank 4 (Cleaning or Etching Bath)	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Aluminum Extrusion Tank 4 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Cooling Water Tank (Aluminum Extrusion) Allowable Concentrations	NA	NA	NA	NA	NA	NA	NA	NA
C-350 Cooling Water Tank Measured Concentrations	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 1 (Pickling Bath)	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 1 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 2 (Pickling Rinse)	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 2 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 3 (Pickling Bath)	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 3 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 4 (Pickling Rinse)	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 4 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 5 (Pickling Rinse)	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 5 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 6 (Pickling Bath)	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Copper Extrusion Tank 6 Measured Concentration	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Cooling Water Tank (Copper Extrusion) Allowable Concentrations	NA	NA	NA	NA	NA	NA	NA	NA
C-285 Cooling Water Tank Measured Concentrations	NA	NA	NA	NA	NA	NA	NA	NA

40CFR136 Preservation and Analytical Methods Use: Yes No

¹ Listed as daily maximum and monthly average respectively

(6) CERTIFICATION

A. CHECK ONE: CYANIDE ANALYSIS ATTACHED CYANIDE CERTIFICATION PROVIDED BELOW (September SAR Only)

In accordance with §467.03(a), based on my inquiry of the person or persons directly responsible for managing compliance with pretreatment standards, I certify that to the best of my knowledge, cyanide has not been used or generated and will not be used or generated in our processes which are regulated by the Aluminum Forming (40 CFR 467.35) categorical pretreatment standards since analyzing the first wastewater sample in January, February, or March of this calendar year; and that the results of the first analysis contained less than 0.07 mg/l cyanide.

(Typed Name)

(Corporate Officer or authorized representative)

Date of Signature _____

B. CHECK ONE: REQUIRED TOXIC ORGANIC ANALYSIS ATTACHED O&G ANALYSIS ATTACHED

In accordance with §467.03(b) & §468.03(b), as an alternative monitoring procedure for pretreatment, the POTW user may measure and limit oil and grease to the levels shown in Section 5.C in lieu of measuring and regulating total toxic organics (TTO).

CORPORATE ACKNOWLEDGEMENT (Optional)

STATE OF ARKANSAS
COUNTY OF MISSISSIPPI

Before me, the undersigned authority, on this day personally appeared

_____ of _____,

a corporation, known to me to be the person whose name is subscribed to the foregoing instrument(s), and acknowledged to me that he executed the same for purposes and considerations therein expressed, in the capacity therein stated and as the act and deed of said corporation.

Given under my hand and seal of office on this _____ day of _____, 199__.

Notary Public in and for _____

County, Arkansas

My commission expires _____.

(7) POLLUTION PREVENTION ACT OF 1990 [42 U.S.C. 13101 et seq.]

§6602 [42 U.S.C. 13101] Findings and Policy para (b) Policy - The Congress hereby declares 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:

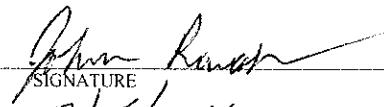
(8) GENERAL COMMENTS

(9) SIGNATORY REQUIREMENTS [40CFR403.12(1)]

I certify under penalty of law that I have personally examined and am familiar with the information in this semi-annual compliance report and all attachments, and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the report, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

JOHN RAUSCH
NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

PLANT MANGER
OFFICIAL TITLE



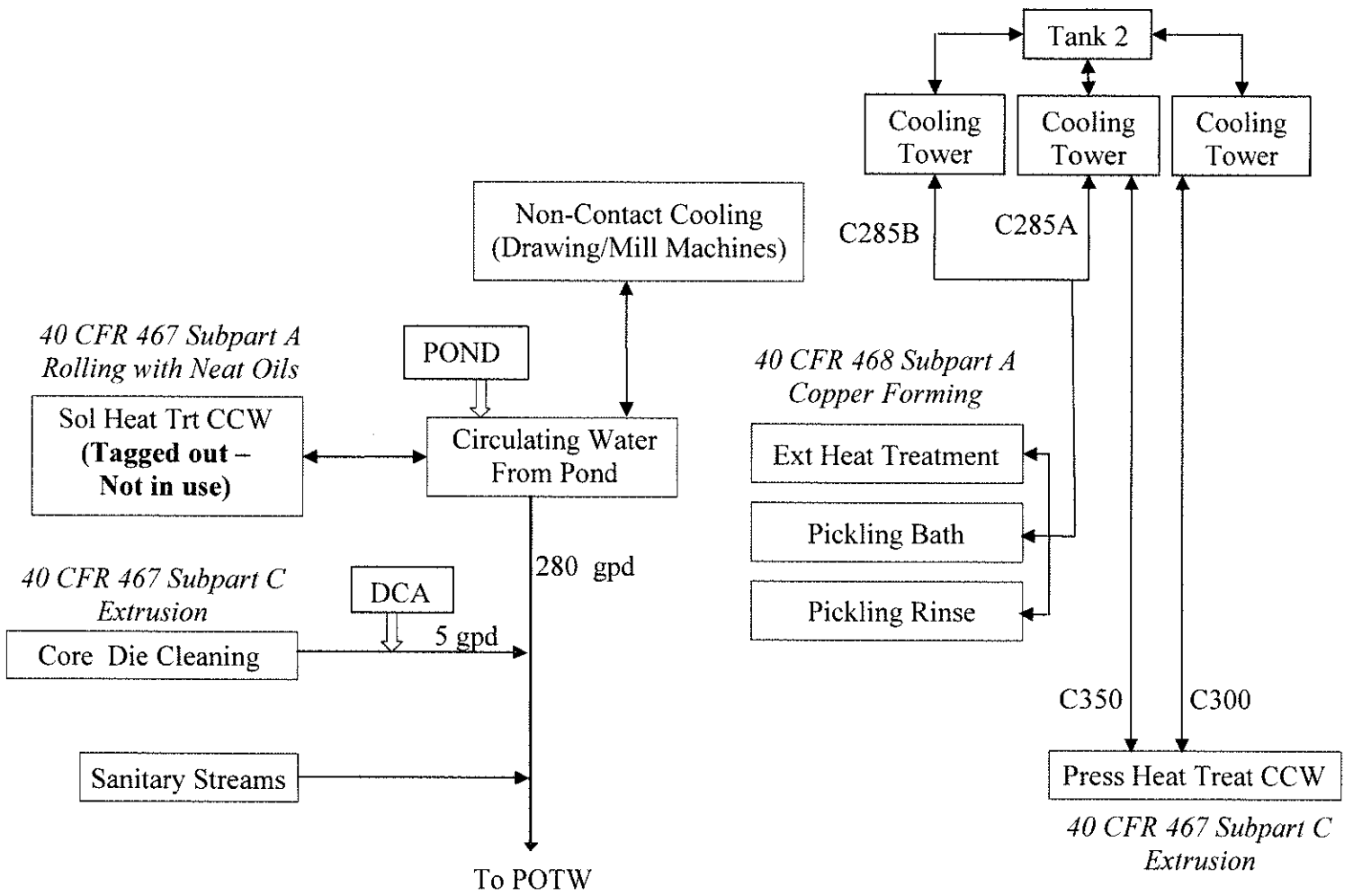
SIGNATURE
3/15/2016

DATE SIGNED

ATTACHMENT 1

Flow Schematics

Algonquin Industries Osceola, Arkansas March 2016



Sampling Points => ↓

§403.6(e) Nonregulated Streams Not Present

§403.6(d) Dilution is not applicable to facilities with only production-based streams

If a stream is not present, show NOT PRESENT or N/P. If a stream is present, the wastewater can enter the POTW but currently has no flow, show 0.0 gpd. If a stream is present but the wastewater cannot enter the POTW, show Zero Discharge or Z/D. If an unregulated stream is present but the User has decided not to declare it at this time, show N/P.

Signature of §403.12(b) Professional

Date

I certify under penalty of law that I have personally examined and am familiar with the information in this document and that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

Plant Manager or the authorized §403.12(l) official

Date

AGQ Diagram (March 2016)

ATTACHMENT 2

Sampling and Analysis Results

Calculations for Equivalent Concentration Limits for REA /Algonquin Industries Division for Rolling Operations Wastewater that Discharges from Pond to the POTW

To calculate concentrations:	
Pond Volume, gal:	80,000
Volume removed from pond since last date pond cleaned, gal	51,000
To calculate cumulative limit:	
Estimated date pond cleaned:	7/1/2011
Date Sample taken:	2/1/2016
days since pond cleaned out	1675

Summary of Calculated Equivalent Concentration Limits for Pond Discharge, mg/L (based on a discharge at the time of sample)		
Parameter	Daily Maximum	Monthly Average
Chromium	NA	2.058
Cyanide	NA	0.315
Zinc	NA	7.116
Copper	NA	9.056
Lead	NA	1.167
Nickel	NA	11.533
TTOal **	NA	NA
TTOcu **	NA	NA
Oil and Grease	NA	175.802

* daily maximums are inappropriate limitations for batch discharges
 ** Oil and Grease limitations are to be used in place of TTD limitations

Summary of Calculated Equivalent Concentration Limits for Pond Discharge, mg/L (considering dilution)		
Parameter	Daily Maximum	Monthly Average
Chromium	0.750	0.114
Cyanide	2.580	0.324
Zinc	4.423	4.181
Copper	NA	NA
Lead	NA	NA
Nickel	NA	NA
TTOal **	NA	NA
TTOcu **	NA	NA
Oil and Grease	63.728	

* Pond discharge dilution calculation conservatively assumes all water discharged from the pond since the last time the pond was cleaned out was not diluted prior to discharge, ignoring the fact that each discharge from the pond was replaced by clean water, resulting in increased dilution with each successive discharge. This assumption results in the minimum calculated allowable concentration.

rolled aluminum off lb = production + 10% reprocessed + 10% scrap = production x 120%				
Rolled Aluminum				
Operational days	Production			Calculated Daily Production (off-lb/day)
	Aluminum passed through (priorated for month) (lbs)	Aluminum passed through (off lbs)	Aluminum passed through (off-lb/day)	
Jun-11	29	9,333	10,826	373
Jul-11	31	14,466	17,395	561
Aug-11	31	14,577	17,492	564
Sep-11	30	13,369	7,643	255
Oct-11	31	13,829	16,585	535
Nov-11	30	18,751	22,501	750
Dec-11	31	13,710	16,452	531
Jan-12	31	17,418	20,902	674
Feb-12	29	21,207	25,448	878
Mar-12	31	10,276	12,335	398
Apr-12	30	18,488	23,350	778
May-12	31	18,787	22,544	727
Jun-12	30	7,380	8,820	294
Jul-12	31	2,259	2,711	87
Aug-12	31	9,874	11,809	374
Sep-12	30	8,453	10,144	338
Oct-12	31	14,376	17,251	556
Nov-12	30	10,420	12,504	417
Dec-12	31	5,300	6,360	205
Jan-13	31	14,884	17,621	568
Feb-13	29	7,703	9,244	319
Mar-13	13	148,892	74,826	5,756
Apr-13	30	46,739	56,087	1,870
May-13	31	28,184	35,021	1,130
Jun-13	30	24,258	29,153	972
Jul-13	31	7,508	8,011	259
Aug-13	31	36,002	43,202	1,394
Sep-13	30	22,159	26,591	886
Oct-13	0	0	0	0
Nov-13	0	0	0	0
Dec-13	0	0	0	0
Jan-14	31	16,251	19,501	629
Feb-14	28	2,086	2,503	89
Mar-14	31	23,733	28,480	919
Apr-14	30	10,474	12,209	407
May-14	31	25,650	30,660	989
Jun-14	30	22,840	27,535	918
Jul-14	31	23,838	27,647	892
Aug-14	31	21,077	24,093	777
Sep-14	30	21,431	25,717	857
Oct-14	0	0	0	0
Nov-14	0	0	0	0
Dec-14	0	0	0	0
Jan-15	31	19,045	19,254	621
Feb-15	0	0	0	0
Mar-15	31	4,700	5,640	182
Apr-15	30	4,700	5,640	188
May-15	31	4,700	5,640	182
Jun-15	30	4,700	5,640	188
Jul-15	31	4,700	5,640	182
Aug-15	31	4,700	5,640	182
Sep-15	0	0	0	0
Oct-15	0	0	0	0
Nov-15	0	0	0	0
Dec-15	0	0	0	0
Jan-16	0	0	0	0
Feb-16	1	0	0	0
Mar-16	NA	NA	NA	NA
Totals	1,323	787,118	840,581	635

rolled copper off lb = production + 30% reprocessed + 10% scrap = production x 140%				
Rolled Copper				
Operational days	Production			Calculated Daily Production (off-lb/day)
	Copper Produced (lbs)	Copper passed through (priorated for month) (off lbs)	Copper passed through (off-lb/day)	
Jun-11	29	338,460	458,049	15,795
Jul-11	31	34,480	132,272	4,267
Aug-11	31	175,834	246,168	7,941
Sep-11	30	158,806	223,728	7,458
Oct-11	31	138,848	278,929	9,030
Nov-11	30	305,333	427,466	14,249
Dec-11	31	75,079	105,111	3,391
Jan-12	31	308,029	431,241	13,911
Feb-12	29	370,078	526,509	18,150
Mar-12	31	245,288	343,414	11,078
Apr-12	30	248,802	349,863	11,662
May-12	31	283,812	397,337	12,817
Jun-12	30	102,824	144,122	4,804
Jul-12	31	171,515	240,121	7,746
Aug-12	31	123,754	173,256	5,589
Sep-12	30	145,675	203,945	6,798
Oct-12	31	185,416	259,582	8,374
Nov-12	30	403,888	565,132	18,838
Dec-12	31	246,481	345,073	11,131
Jan-13	31	295,934	414,308	13,365
Feb-13	28	291,155	407,617	14,558
Mar-13	31	186,479	261,071	8,422
Apr-13	30	284,801	398,721	13,291
May-13	31	56,724	82,214	2,652
Jun-13	30	74,162	103,855	3,462
Jul-13	31	5,777	8,088	261
Aug-13	31	226,838	317,575	10,244
Sep-13	0	0	0	0
Oct-13	31	112,245	157,143	5,069
Nov-13	30	209,150	292,810	9,760
Dec-13	31	85,581	91,813	2,962
Jan-14	31	28,358	38,701	1,281
Feb-14	28	72,956	102,136	3,648
Mar-14	31	147,738	208,833	6,772
Apr-14	30	71,111	99,555	3,319
May-14	31	35,744	50,042	1,614
Jun-14	30	100,084	140,132	4,671
Jul-14	31	90,389	125,516	4,081
Aug-14	31	75,556	105,781	3,412
Sep-14	30	89,815	125,881	4,196
Oct-14	0	0	0	0
Nov-14	0	0	0	0
Dec-14	0	0	0	0
Jan-15	0	0	0	0
Feb-15	0	0	0	0
Mar-15	0	0	0	0
Apr-15	0	0	0	0
May-15	0	0	0	0
Jun-15	0	0	0	0
Jul-15	0	0	0	0
Aug-15	0	0	0	0
Sep-15	0	0	0	0
Oct-15	0	0	0	0
Nov-15	0	0	0	0
Dec-15	0	0	0	0
Jan-16	0	0	0	0
Feb-16	1	0	0	0
Mar-16	NA	NA	NA	NA
Totals	1,187	6,714,219	9,384,112	7,008

Input Values For Determining Effluent Guideline Limits for REA /Algonquin Industries Division for Aluminum Die Cleaning Wastestream

To calculate concentrations:	
Die Cleaning Flow Rate, gp	5
To calculate cumulative limit:	
Beginning date of period of semiannual report	8/31/2015
End date of period of semiannual report	2/29/2016
Date Sample taken:	2/1/2016
Days from beginning of semi annual report through sample date	154

Summary of Calculated Equivalent Concentration Limits for Caustic Soda Rinse of Extrusion Die Discharge, mg/L		
Parameter	Daily Maximum	Monthly Average
Chromium	47	19.2
Cyanide	31	12.6
Zinc	154	66.2
TTOal *	NA	NA
Oil and Grease	5673	2773.6

* Oil and Grease limitations are to be used in place of TTO limitations

extruded aluminum off lb = production + 10% scrap = production x 110%				
2015	Extruded Aluminum (All lines) Production			
	Operational days	Aluminum Produced (lbs)	Aluminum passed through (prorated for month) (off lbs)	Calculated Daily Production (off-lb/day)
Sep-15	30	365,492	402,041	13,401
Oct-15	31	365,492	402,041	12,969
Nov-15	30	365,492	402,041	13,401
Dec-15	31	365,492	402,041	12,969
Jan-16	31	365,492	402,041	12,969
Feb-16	1	365,492	13,863	13,863
Mar-16	NA	0	NA	NA
Apr-16	NA	0	NA	NA
May-16	NA	0	NA	NA
Jun-16	NA	0	NA	NA
Jul-16	NA	0	NA	NA
Aug-16	NA	0	NA	NA
Totals	154	2,192,953	2,024,070	13,143