ALGOMA COMMUNITY LIAISON COMMITTEE (ACLC)

ASI EMISSIONS CONCERNS

ABSTRACT

Information for the members of the Algoma Community Liaison Committee (ACLC) related to ASI emissions to reconsider for future discussions.

Selva Rasaiah

Submitted to: ACLC Members
c/o Mr. Ron Dorscht (Area Supervisor)
Ministry of the Environment
Conservation and Parks
Sault Ste. Marie ON

Submitted by: Selva Rasaiah

MISSING OPACITY DATA FROM NO. 8 BATTERY - COB STACK PERFORMANCE GRAPH

CLC Meeting #33 Stack Opacity Graph

Selva Rasaiah <selvarasaiah@hotmail.com>

Wed 29/07/2020 11:32 AM

To: Fred.Post@algoma.com <Fred.Post@algoma.com>

Cc: Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Lori.Greco@ontario.ca <Lori.Greco@ontario.ca>; Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>

1 attachments (311 KB)

Slide7_CLCmeeting33.pdf_B.pdf;

Hello Mr. Post,

I was wondering if you have the portion of the graph depicting the cokemaking opacity performance for COB #8 for the period highlighted for July 26, 2019 to August 25, 2019. Slide (#7) from CLC meeting #33 says that COB #8 opacity meter was off-line from July 03 to July 25. There are opacity violations listed on your Process Upset Table for the period following that event, but your graph is not complete for that portion. Is there a reason the graph does not show this period?

Thank you.

Selva

Photo 1: E-mail to Fred Post (ASI) on July 29, 2020 regarding missing data (**No reply**)

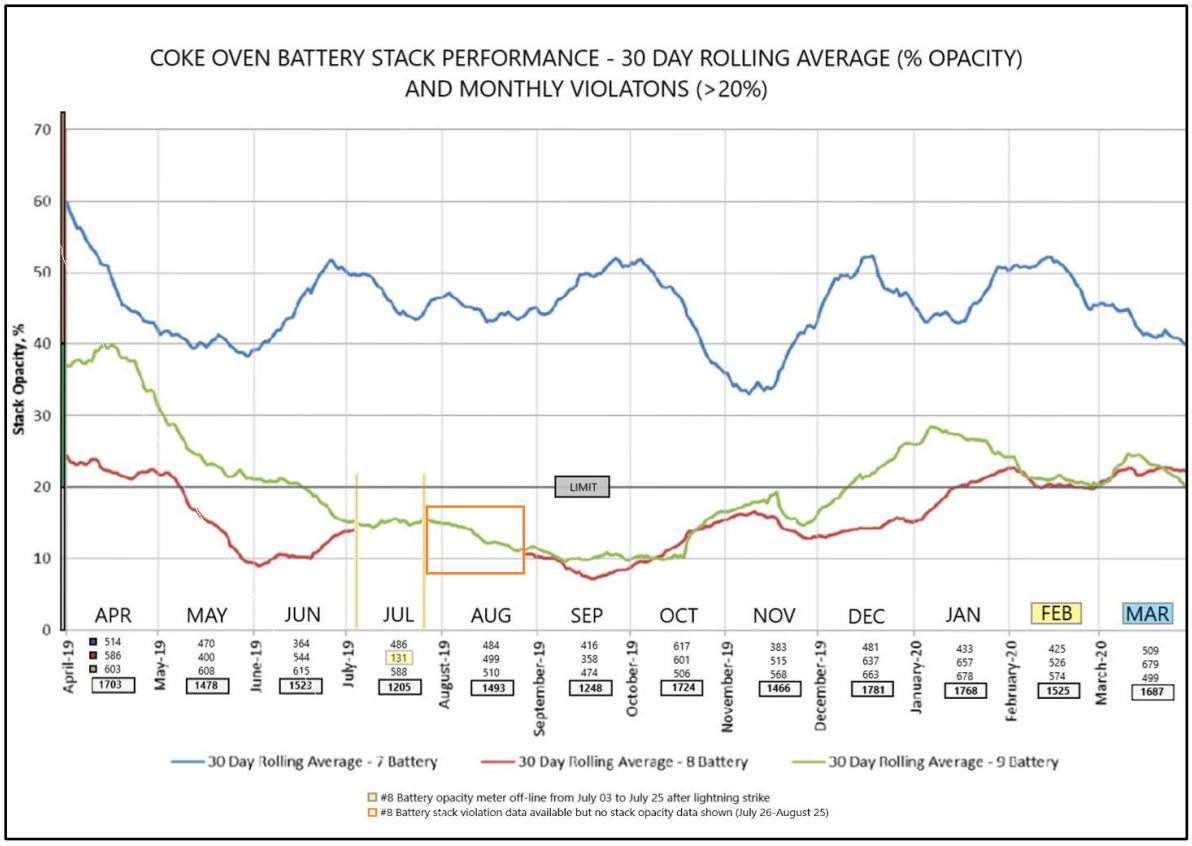


Photo 2: Modified ACLC # graph with missing data (orange box) for No. 8 Battery (red line)

OPACITY VIOLATIONS DATA FOR COB STACKS SHOWING MONITOR OFFLINE

ASI COKE OVEN BATTERY STACK VIOLATIONS (>20%)
JULY 01, 2019 - August 31, 2019

July Violations 2019				August Violations 2019			
Date	7 Battery	8 Battery	9 Battery	Date	7 Battery	8 Battery	9 Battery
01-Jul-19	21	26	24	01-Aug-19	7	13	25
02-Jul-19	14	23	17	02-Aug-19	11	11	15
03-Jul-19	19	10	19	03-Aug-19	29	10	11
04-Jul-19	11	offline	13	04-Aug-19	14	11	20
05-Jul-19	11	offline	22	05-Aug-19	21	9	17
06-Jul-19	6	offline	24	06-Aug-19	26	14	25
07-Jul-19	18	offline	21	07-Aug-19	22	27	19
08-Jul-19	15	offline	13	08-Aug-19	17	16	26
09-Jul-19	9	offline	16	09-Aug-19	19	23	22
10-Jul-19	16	offline	21	10-Aug-19	21	25	15
11-Jul-19	11	offline	21	11-Aug-19	22	16	15
12-Jul-19	19	offline	19	12-Aug-19	24	24	20
13-Jul-19	22	offline	20	13-Aug-19	22	25	17
14-Jul-19	8	offline	16	14-Aug-19	9	8	10
15-Jul-19	24	offline	25	15-Aug-19	12	25	19
16-Jul-19	23	offline	25	16-Aug-19	12	20	19
17-Jul-19	14	offline	12	17-Aug-19	14	22	20
18-Jul-19	15	offline	19	18-Aug-19	8	27	16
19-Jul-19	21	offline	25	19-Aug-19	9	17	4
20-Jul-19	16	offline	13	20-Aug-19	17	22	10
21-Jul-19	13	offline	23	21-Aug-19	11	12	18
22-Jul-19	16	offline	12	22-Aug-19	17	10	10
23-Jul-19	9	offline	16	23-Aug-19	14	16	9
24-Jul-19	5	offline	23	24-Aug-19	15	10	18
25-Jul-19	18	offline	19	25-Aug-19	13	10	18
26-Jul-19	21	7	14	26-Aug-19	13	19	19
27-Jul-19	14	11	19	27-Aug-19	10	14	13
28-Jul-19	14	12	19	28-Aug-19	5	12	18
29-Jul-19	29	10	18	29-Aug-19	16	12	13
30-Jul-19	21	11	21	30-Aug-19	7	9	16
31-Jul-19	13	21	19	31-Aug-19	27	10	13
TOTAL	486	131	588	TOTAL	484	499	510

Note: All data compiled from ASI Process Upset Table.
No. 8 battery opacity meter was off-line from July 03 to July 25 after a lightning strike

Photo 3: Table with missing data (orange box) for No. 8 Battery with opacity violations recorded

Photo 4: ASI No.8 Coke Oven Battery (COB) stack

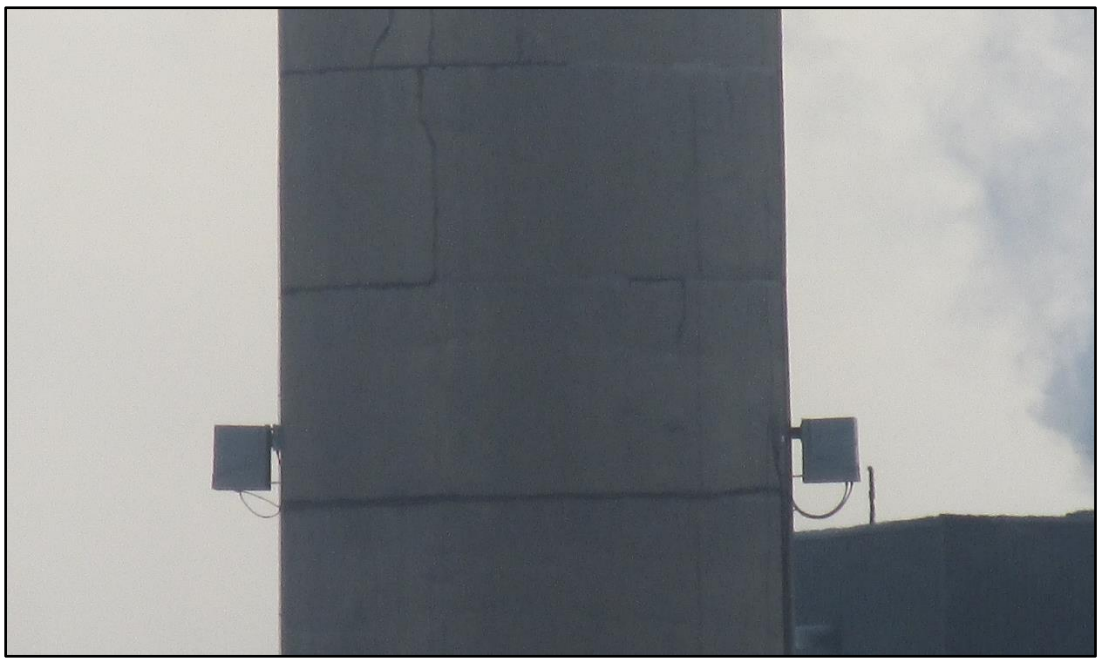


Photo 5: ASI No.8 Coke Oven Battery (COB) stack opacity monitor (small grey boxes)

NO. 8 BATTERY COB EMISSIONS – OPACITY METER OFFLINE (Jul 03 -July 25)

Photo 6: High opacity emissions from No.8 COB stack and BF7 casthouse emission (orange)

Photo 7: High opacity emissions from No.8 COB stack

NO. 8 BATTERY COB EMISSIONS – OPACITY METER ONLINE (Jul 26 – Aug 25)

Photo 8: Heavy high opacity emissions from No.8 Coke Oven Battery (COB) stack

Photo 9: Heavy high opacity emissions from No.8 Coke Oven Battery (COB) stack

DISCRPENCIES WITH PUSHING DATA RECORDED AND PRESENTED

Re: Pushing Violation Data (Clarification)

Selva Rasaiah <selvarasaiah@hotmail.com>
Tue 15/12/2020 10:24 AM

To: Fred.Post@algoma.com <Fred.Post@algoma.com>
Cc: Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Paul.Walz@algoma.com <Paul.Walz@algoma.com>; Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>; Greco, Lori (MECP) <Lori.Greco@ontario.ca>; Peter McLarty <pjmclarty@shaw.ca>; David Trowbridge <dtrowbridge7@gmail.com>

Hi Fred,

Could you please let me know your position regarding the pushing emissions data since I intend to refer to it assuming any pushing emission noted on your Process Upset Tables did violate the current limit (the push was completed and quenched)?

Thanks,

Selva

From: Selva Rasaiah <selvarasaiah@hotmail.com>
Sent: December 10, 2020 8:55 PM
To: Fred.Post@algoma.com <Fred.Post@algoma.com>
Cc: Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Paul.Walz@algoma.com <Paul.Walz@algoma.com>; Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>; Greco, Lori (MECP) <Lori.Greco@ontario.ca>; Peter McLarty <pjmclarty@shaw.ca>; David Trowbridge <dtrowbridge7@gmail.com>
Subject: Re: Pushing Violation Data

Hi Fred,

It should read ACLC #24 March 06, 2018, pg. 6 (not 2019).

Thanks,

Selva

From: Selva Rasaiah
Sent: December 10, 2020 1:47 PM
To: Fred.Post@algoma.com <Fred.Post@algoma.com>
Cc: Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Paul.Walz@algoma.com <Paul.Walz@algoma.com>; Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>; Greco, Lori (MECP) <Lori.Greco@ontario.ca>; Peter McLarty <pjmclarty@shaw.ca>; David Trowbridge <dtrowbridge7@gmail.com>
Subject: Pushing Violation Data

Hi Fred,

I was wondering if you could explain the differences in the data presented on you Process Upset Table and ACLC Presentations with respect to pushing violations. I could be misinterpreting the bar graph in the ACLC presentations. I am assuming the ovens were fully pushed and violated the current limit if it was reported on the Process Upset Tables (since it says pushing emission).

Examples:

FEB 2017 (7 battery, 8 battery, 9 battery) =TOTAL (>50%)

Process Upset Table: (0,5,5) = 10
ACLC Presentation: (2,0,0) = 2

*ACLC #24 March 06, 2019,pg. 6

Photo 10: E-mail to Fred Post (ASI) regarding the discrepancies with pushing data (**No reply**)

REPORTING ACCURACY (DISCREPENCIES) to ACLC OF THE NUMBER OF PUSHING VIOLATIONS

COMPARISON OF REPORTED PUSHING VIOLATIONS FOR COKE OVEN BATTERIES (7,8,9) (FEBRUARY-JULY)

2017

LIMIT (50%)	7		8		9		TOTAL		
	ACLC	PROCESS	ACLC	PROCESS	ACLC	PROCESS	ACLC	PROCESS	REPORTED
FEB	2	0	0	5	0	5	2	10	20.0%
MAR	2	2	3	12	1	6	6	20	30.0%
APR	1	2	0	24	1	7	2	33	6.1%
MAY	2	0	0	9	0	6	2	15	13.3%
JUN	0	0	0	2	0	1	0	3	0.0%
JULY	3	2	3	15	0	3	6	20	30.0%
TOTAL	10	6	6	67	2	28	18	101	
REPORTED	166.7%		9.0%		7.1%		17.8%		

2019

LIMIT (40%)	7		8		9		TOTAL		
	ACLC	PROCESS	ACLC	PROCESS	ACLC	PROCESS	ACLC	PROCESS	REPORTED
FEB	1	3	2	13	0	1	3	17	17.6%
MAR	2	1	0	14	3	3	5	18	27.8%
APR	0	2	1	7	0	0	1	9	11.1%
MAY	2	8	1	1	2	2	5	11	45.5%
JUN	5	6	3	8	0	0	8	14	57.1%
JULY	2	4	3	7	1	4	6	15	40.0%
TOTAL	12	24	10	50	6	10	28	84	
REPORTED	50.0%		20.0%		60.0%		33.3%		

* Data compiled from ASI Process Upset Tables and ACLC Meeting Presentations

Photo 11: Table with missing data (orange box) for No. 8 Battery with opacity violations recorded

Note: Data compared for the period where both the ACLC and Process Upset Table data were available

NO. 7 BATTERY FAILED PUSHES OBSERVED– JULY (NOT REPORTED)

Note: The pushing limit in 2019 was 40%. Pushing emissions were not reported on ASI Process Upset Table as required by Condition 11 of Environmental Compliance Approval 3614-82DLFY

SECOND FAILED PUSH ON 7 BATTTERY - JULY 17, 2019 @ 3:01 pm (>60%) – NOT REPORTED

Note: A COB oven that receives an overall pass (< 40%) would not have emissions seen in these photos by an observer over 1 km away by the time the coke transfer car (locomotive car) reaches the quenching tower. The visual observations on-site would be made lower down where the overall opacity would be higher.

NO. 7 BATTERY FAILED PUSHES OBSERVED- AUGUST (NOT REPORTED)

Note: The pushing limit in 2019 was 40%. Pushing emissions were not reported on ASI Process Upset Table as required by Condition 11 of Environmental Compliance Approval 3614-82DLFY

NO.7 BATTERY FAILED PUSH AUGUST 12, 2019 @ 11:20 am (>40%) -NOT REPORTED

Note: A COB oven that receives an overall pass (< 40%) would not have emissions seen in these photos by an observer over 1 km away by the time the coke transfer car (locomotive car) reaches the quenching tower. The visual observations on-site would be made lower down where the opacity would be higher.

PUSHING DATA NO LONGER NOTED ON ACLC METTING PRESENTATIONS

ACLC Meeting Presentation - Pushing Violations

Selva Rasaiah <selvarasaiah@hotmail.com>

Tue 05/01/2021 10:00 AM

To: Fred.Post@algoma.com <Fred.Post@algoma.com>

Cc: Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>; David Trowbridge <dtrowbridge7@gmail.com>; Peter McLarty <pjmclarty@shaw.ca>; Catherine Taddo <c.Taddo@cityssm.on.ca>

Hello Mr. Post,

I was wondering why there is no data regarding pushing violations (performance) in ACLC Meeting presentations since September 10, 2019 (Meeting #30). Could you please provide the completed chart for the pushing violations >40% for 2019 (Sept-Dec) and data for 2020 (Jan-Dec)? Also, your recent ACLC presentation stated the end flue rebuilds were on 7 Battery and where ongoing, oven #61 was completed in November. Should it say 8 battery, since 7 battery has only 57 ovens or are you stating 8-61 was completed in addition to 7 battery end flue rebuilds which are currently ongoing?

Thank you,

Selva

Photo 12: E-mail to Fred Post regarding no data at ACLC meetings for pushing performance (violations).

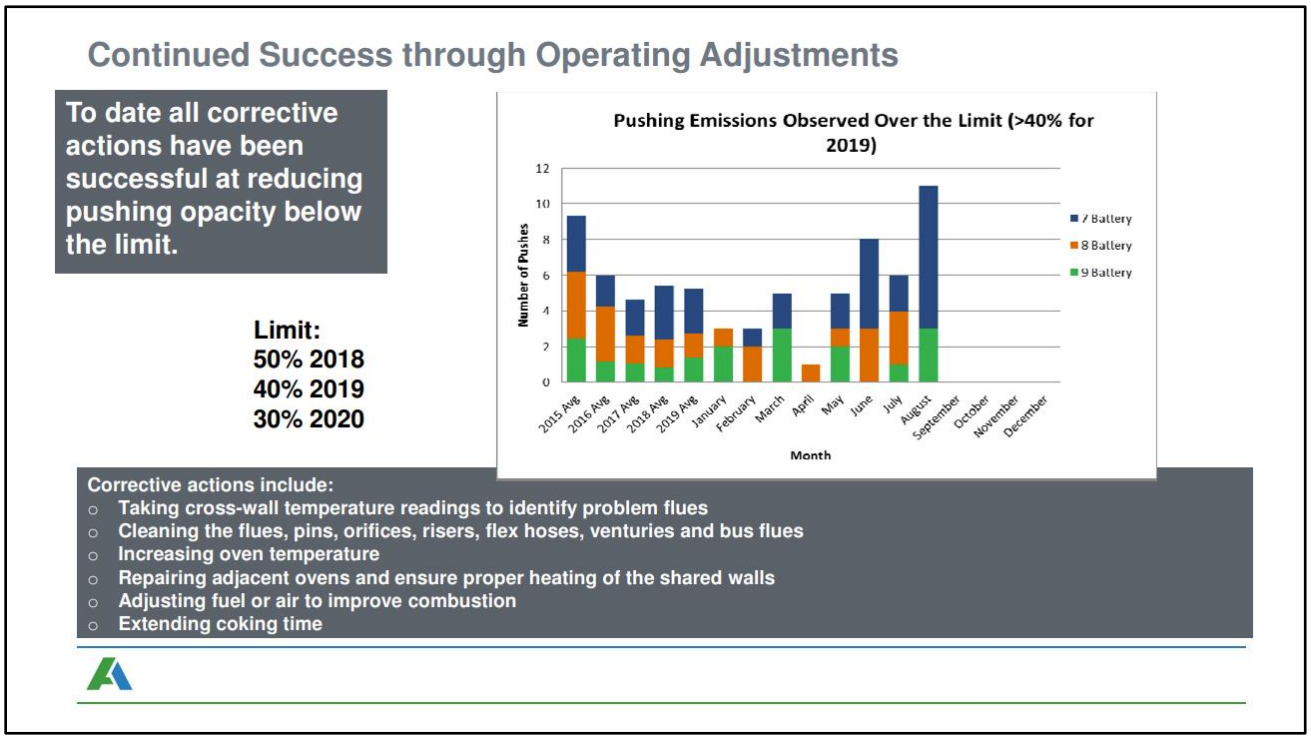


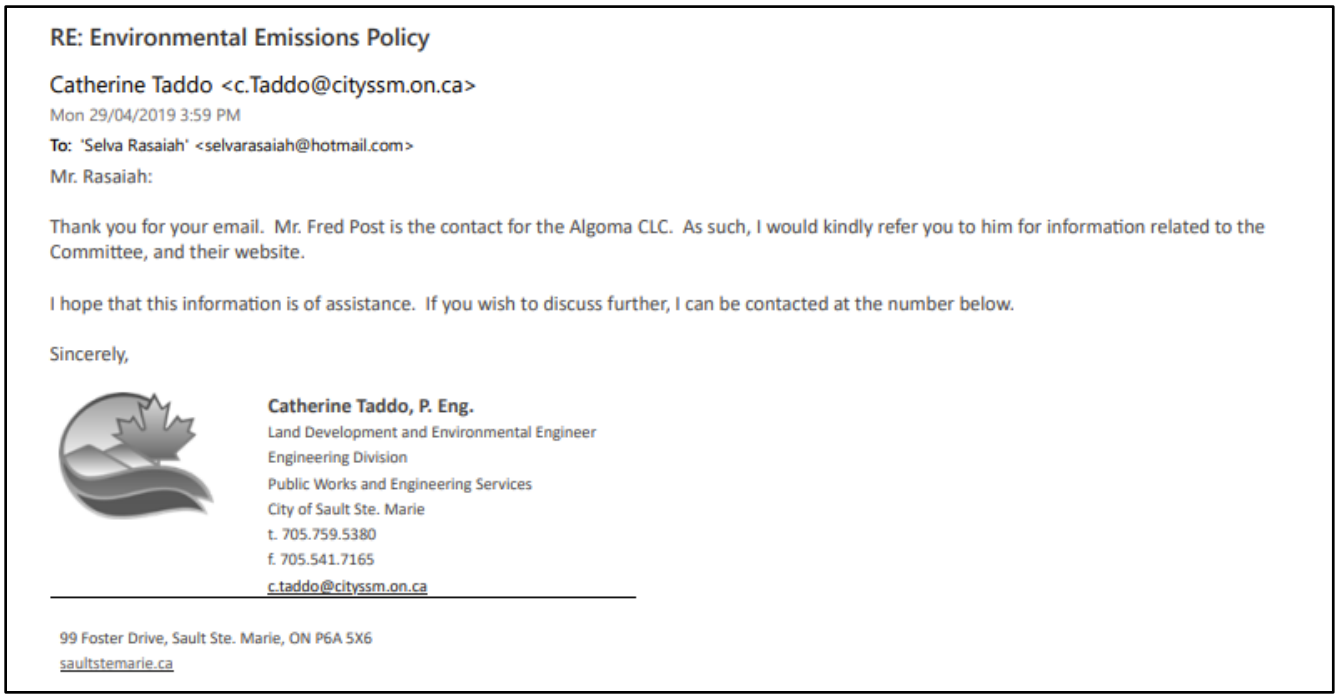
Photo 13: Last ACLC meeting slide noting pushing performance (September 10, 2019 meeting 30, slide 6)

ASI COKE OVEN BATTERY PUSHING EMISSIONS

Photo 14: Heavy emissions from pushing operations on No. 8 battery

Photo 15: Emissions from soaking and the start of a push (removal of coke) on 9 battery

REQUESTS FOR ACLC CONTACT INFORMATION



RE: Environmental Emissions Policy

Catherine Taddo <c.Taddo@citysm.on.ca>

Mon 29/04/2019 3:59 PM

To: 'Selva Rasaiah' <selvarasaiah@hotmail.com>

Mr. Rasaiah:

Thank you for your email. Mr. Fred Post is the contact for the Algoma CLC. As such, I would kindly refer you to him for information related to the Committee, and their website.

I hope that this information is of assistance. If you wish to discuss further, I can be contacted at the number below.

Sincerely,

Catherine Taddo, P. Eng.
Land Development and Environmental Engineer
Engineering Division
Public Works and Engineering Services
City of Sault Ste. Marie
t. 705.759.5380
f. 705.541.7165
c.taddo@citysm.on.ca

99 Foster Drive, Sault Ste. Marie, ON P6A 5X6
saultstemarie.ca

Photo 16: E-mail from Catherine Taddo referring me to Fred Post for ACLC contact information.

Community Liaison Committee contacts

Selva Rasaiah <selvarasaiah@hotmail.com>

Tue 21/05/2019 10:20 PM

To: Fred.Post@algoma.com <Fred.Post@algoma.com>; Christopher.Galizia@algoma.com <Christopher.Galizia@algoma.com>

Hello,

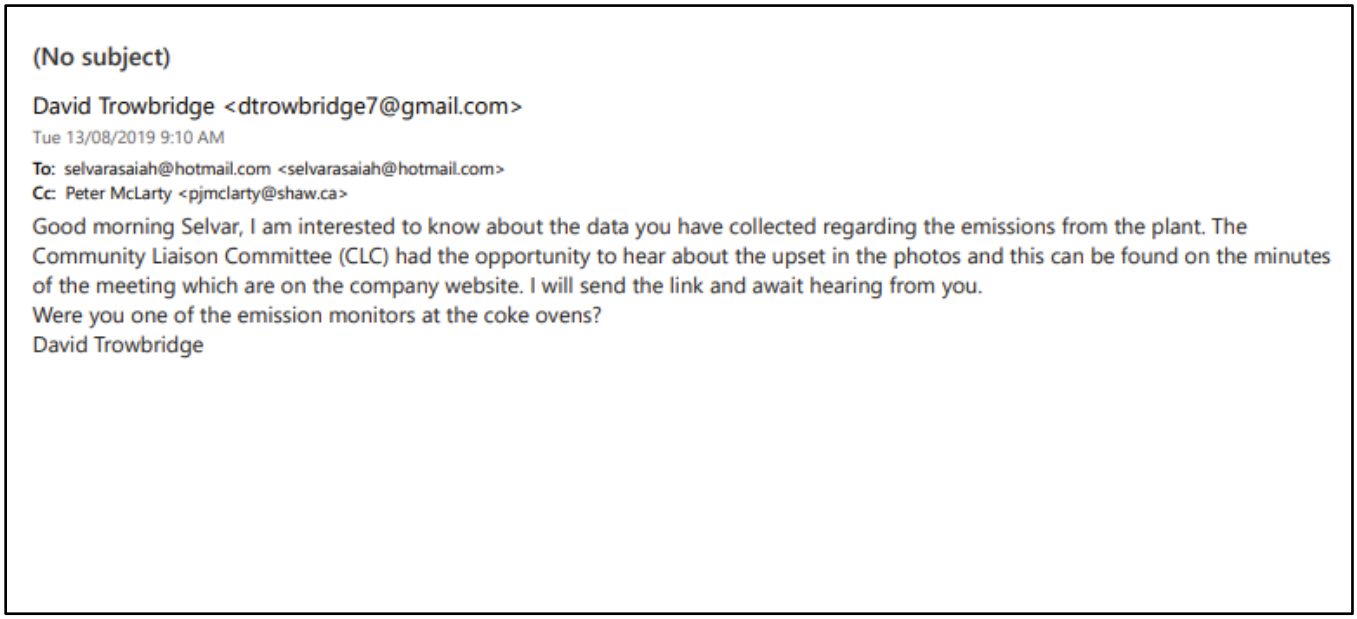
Could you please provide the names and e-mails of the members of the Community Liaison Committee.

Thank you.

Selva

Photo 17: E-mail to Fred Post requesting ACLC contact information (**No reply**)

ACKNOWLEDGEMENTS FROM ACLC PUBLIC MEMEBERS



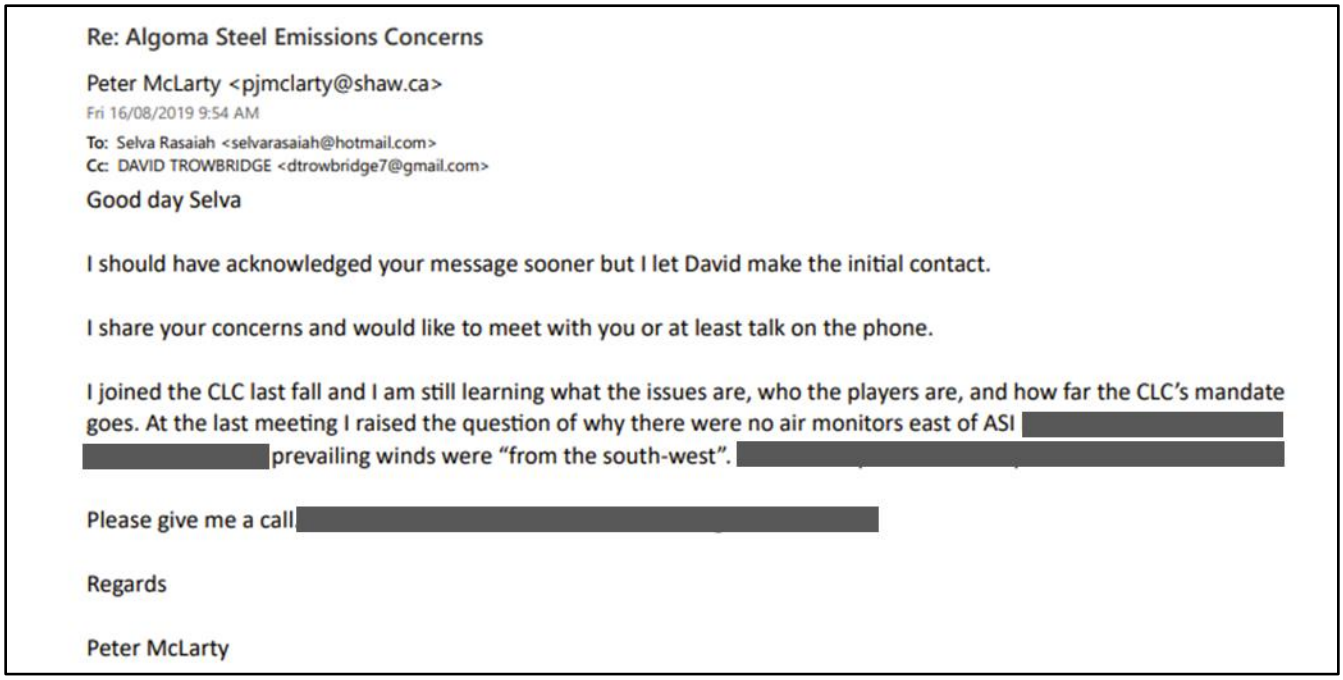
(No subject)

David Trowbridge <dtrowbridge7@gmail.com>
Tue 13/08/2019 9:10 AM

To: selvarasaiah@hotmail.com <selvarasaiah@hotmail.com>
Cc: Peter McLarty <pjmclarty@shaw.ca>

Good morning Selvar, I am interested to know about the data you have collected regarding the emissions from the plant. The Community Liaison Committee (CLC) had the opportunity to hear about the upset in the photos and this can be found on the minutes of the meeting which are on the company website. I will send the link and await hearing from you.
Were you one of the emission monitors at the coke ovens?
David Trowbridge

Photo 18: Acknowledgement e-mail from ACLC Public Member, David Trowbridge



Re: Algoma Steel Emissions Concerns

Peter McLarty <pjmclarty@shaw.ca>
Fri 16/08/2019 9:54 AM

To: Selva Rasaiah <selvarasaiah@hotmail.com>
Cc: DAVID TROWBRIDGE <dtrowbridge7@gmail.com>

Good day Selva

I should have acknowledged your message sooner but I let David make the initial contact.

I share your concerns and would like to meet with you or at least talk on the phone.

I joined the CLC last fall and I am still learning what the issues are, who the players are, and how far the CLC's mandate goes. At the last meeting I raised the question of why there were no air monitors east of ASI [redacted] prevailing winds were "from the south-west". [redacted]

Please give me a call [redacted]

Regards

Peter McLarty

Photo 19: Acknowledgement e-mail from ACLC Public Member, Peter McLarty

PAST AND CURRENT ALGOMA COMMUNITY LIAISON COMMITTEE (ACLC) MEMBERSHIP

Location: Essar Steel Algoma Inc.
Administration Building
Main Conference Room

Time: Noon to 2:00pm (Followed with driving tour)

CLC Members in Attendance
Jerry Suurna - Essar Steel Algoma Inc.
Jerry Freiman - Essar Steel Algoma Inc.
Blair McLaughlin - Ontario Ministry of Environment
Ron Dorscht - Ontario Ministry of Environment (Alternate)
Susan Hamilton Beach - Corporation of the City of Sault Ste. Marie (Alternate)
David Trowbridge - Public
Patt Marquis – Public
Kathie Brosemer – Public (Alternate)
Dave Martin - Chippewa County Health Department
Kara Flannigan - Algoma Public Health (Alternate)
Rainer Schmitt - United Steelworkers Local 2251
Bill Denneny - United Steelworkers Local 2251 (Alternate)

CLC Members not in Attendance
Dan Sayers Jr. - Batchewana First Nations
Don Elliott – City
Sherri Cleaves – Algoma Public Health

Photo 20: ACLC Meeting #6 Meeting Minutes listing members as Essar Steel Algoma Inc. (ESAI) **2011**

Membership Items

Current Members and Alternates

Representation	Primary Member	Alternate
Algoma Steel	Fred Post	Chris Galizia
Ministry of Environment, Conservation & Parks	Lori Greco	Ron Dorscht
Public	David Trowbridge	Peter McLarty
Public	Jillian Marquis	
SSM Tribe of Chippewa Indians	Kathie Brosemer	
Algoma Public Health	Kara Flannigan	Chris Spooney
Chippewa County Health Dept.	Steve Carey	Suzanne Lieurance
Batchewana First Nations	Dan Sayers Jr.	
City of Sault Ste. Marie	Catherine Taddo	Maggie McAuley
United Steel Workers Local 2251	Wayne Hubbard	
St. Mary's River RAP Coordinator	Lisa Derickx	

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Photo 21: ACLC Meeting #34 Meeting Minutes listing members as Algoma Steel Inc. (ASI) **2021**

E-MAIL TO MECP RON DORSCHT REGARDING ACLC TERM AND CONDITIONS (AUGUST 05, 2020)

Re: CLC Terms of Reference

Selva Rasaiah <selvarasaiah@hotmail.com>

Wed 16/09/2020 2:42 PM

To: Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>
Cc: Fred.Post@algoma.com <Fred.Post@algoma.com>; Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Greco, Lori (MECP) <Lori.Greco@ontario.ca>; Peter McLarty <pjmclarty@shaw.ca>; David Trowbridge <dtrowbridge7@gmail.com>; Evers, Melissa (MECP) <Melissa.Evers@ontario.ca>; John OLeary <joleary@ombudsman.on.ca>; Mayor Provenzano <mayor.provenzano@cityssm.on.ca>

Hello Mr. Dorscht,

I would appreciate a response to my e-mail on August 05, 2020 regarding the CLC Terms of Reference. Could you please let me know your position on the matter?

Thank you.

Selva

From: Selva Rasaiah
Sent: August 5, 2020 8:21 AM
To: Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>
Cc: Fred.Post@algoma.com <Fred.Post@algoma.com>; Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Greco, Lori (MECP) <Lori.Greco@ontario.ca>; Peter McLarty <pjmclarty@shaw.ca>; David Trowbridge <dtrowbridge7@gmail.com>
Subject: CLC Terms of Reference

Hello Mr. Dorscht,

I was wondering if you could tell me if there is a more recent CLC Terms of Reference than the document posted on Algoma Steel Inc. (ASI) website. This document is over 11 years old and was written with Essar Steel Algoma. Due to the age and change in ownership, should this document be revised to reflect current membership and company status? The CLC Terms of Reference do not specifically state whether members of the public can attend. ArcelorMittal Dofasco (AMD) allows "interested" members of the public to attend (as strictly observers). If it is a requirement, does ASI have some exemption to this condition considering Fred Post did not suggest this option when I requested for information to contact some of the members. I had to contact two of the public members (Peter McLarty and David Trowbridge) through the environmental organization that they are members of to discuss my concerns. Also, AMD meeting minutes specifically state the names and questions from the CLC members who addressed concerns in the meeting and ASI does not. Since a member of the public has no access and limited contact with its members, there should be a mechanism for which an interested member of the public can be informed and have their concerns addressed. Could you explain what the ministry's expectation is of the CLC to communicate with the public and how members of the public can share their concerns with those members?

Thank you,

Selva

Note: MECP Dorscht has **not replied** to this e-mail.

CURRENT ACLC TERMS AND CONDITIONS – SIGNATORIES

CLC Meeting Venue:
The company will be responsible for hosting scheduled meetings of the CLC committee at its facility in Sault Ste. Marie.

Chairperson:
The CLC Chairperson will be a management representative of the company and shall ensure that all meetings of the CLC are conducted in an efficient and professional manner and further that all members are afforded the opportunity of input into discussions of committee matters. Further, the Chairperson is responsible for ensuring the Terms of Reference for the CLC committee are tabled at the 2nd meeting of the 2nd year for review calling for revisions if necessary.

Meetings: Administration/Agendas/Minutes
The distribution of agendas and the taking and distribution of minutes for each meeting shall be the responsibility of the company and shall be drafted for distribution to the CLC members within four weeks following each meeting. Once the draft minutes have been approved by the members, the company shall post same on the website within two weeks of approval.

Effective Date:
The Terms of Reference of the CLC become effective on the date by which the initial members of the initial CLC unanimously accept the document.

Read and accepted by the initial members of the CLC on December 8th, 2008.

For Essar Steel Algoma Inc.

For the Corporation of the City of Sault Ste. Marie

For the Public at Large
And/or (Academia)

For the Ministry of Environment

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E-MAIL FROM FRED POST (ASI) TO ACLC DISCUSSING UPDATING ACLC TERMS AND CONDITIONS

Tori Johnson

From: Fred.Post@algoma.com
Sent: Monday, November 23, 2020 10:53 AM
To: Catherine Taddo; CSpooney@algomapublichealth.com; dansayers@batchewana.ca; dtrowbridge7@gmail.com; Ron.Dorscht@ontario.ca; Dennis.Gagne@algoma.com; Chris.Galizia@algoma.com; Lori.Greco@ontario.ca; wayne.hubbard@algoma.com; jillianmarquis94@gmail.com; KFlannigan@algomapublichealth.com; kathie@brosemer.org; Lisa.Derickx@algomau.ca; Maggie McAuley; pjmclarty@shaw.ca; scarey@chippewahd.com; slieurance@chippewahd.com
Subject: CLC Terms of Reference
Attachments: Electronic Scan Copy Terms of Reference signed.pdf

This email originated outside of the Corporation of the City of Sault Ste. Marie.
Do not open attachments or click links unless you verify the sender and know the content is safe.

Hi Everyone,
As discussed at our last CLC meeting, I am circulating the original Terms of Reference (TOR) for any feedback the committee may have as I intend to update this document with current information.

Specifically, I would like to update the document with a new company name and current signatories as well as to list the Sault Ste. Marie Tribe of Chippewa Indians as member of the committee. There will be some other administrative amendments that I plan to make as well and I'll be sure that all amendments be shown in track changes before a new TOR is finalized.

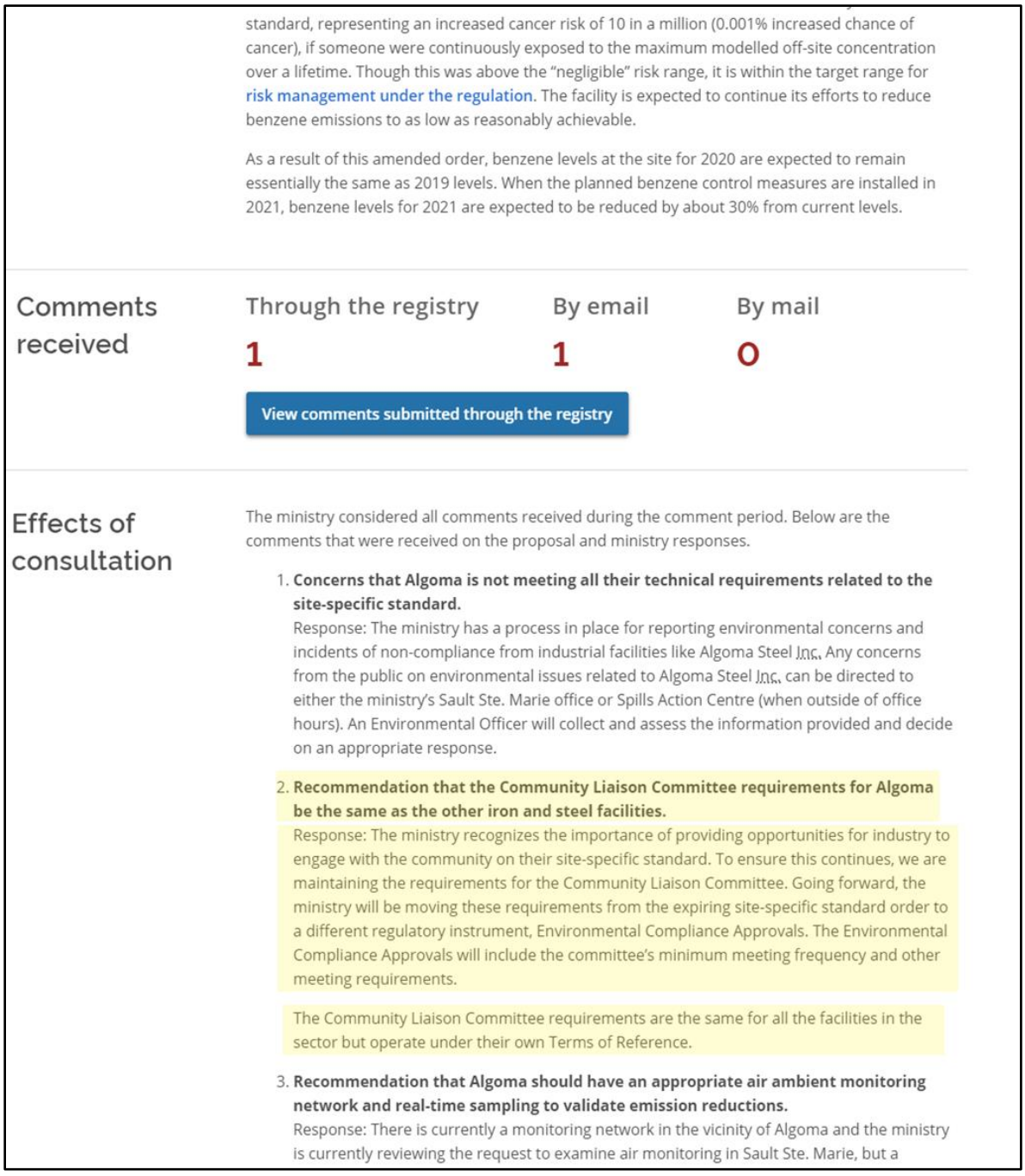
Please review and provide any feedback that you have.
Regards
Fred

Fred Post | Manager - Environment Control |
T +1 - 705 - 945 4568 | M +1 - 705 - 206 1122 | F +1 - 705 - 945 2972 |
E Fred.Post@algoma.com | www.algoma.com |

ALGOMA
STEEL INC.
105 West Street • Sault Ste. Marie • Ontario • Canada • P6A 7B4

Note: E-mail was acquired through SSM FOI 2020-58

FINAL DECISION ERO 019-2526 REGARDING EXTENDING SITE-SPECIFIC STANDARDS (SSS)



standard, representing an increased cancer risk of 10 in a million (0.001% increased chance of cancer), if someone were continuously exposed to the maximum modelled off-site concentration over a lifetime. Though this was above the "negligible" risk range, it is within the target range for risk management under the regulation. The facility is expected to continue its efforts to reduce benzene emissions to as low as reasonably achievable.

As a result of this amended order, benzene levels at the site for 2020 are expected to remain essentially the same as 2019 levels. When the planned benzene control measures are installed in 2021, benzene levels for 2021 are expected to be reduced by about 30% from current levels.

Comments received

Through the registry	By email	By mail
1	1	0

View comments submitted through the registry

Effects of consultation

The ministry considered all comments received during the comment period. Below are the comments that were received on the proposal and ministry responses.

1. **Concerns that Algoma is not meeting all their technical requirements related to the site-specific standard.**
   Response: The ministry has a process in place for reporting environmental concerns and incidents of non-compliance from industrial facilities like Algoma Steel Inc. Any concerns from the public on environmental issues related to Algoma Steel Inc. can be directed to either the ministry's Sault Ste. Marie office or Spills Action Centre (when outside of office hours). An Environmental Officer will collect and assess the information provided and decide on an appropriate response.

2. **Recommendation that the Community Liaison Committee requirements for Algoma be the same as the other iron and steel facilities.**
   Response: The ministry recognizes the importance of providing opportunities for industry to engage with the community on their site-specific standard. To ensure this continues, we are maintaining the requirements for the Community Liaison Committee. Going forward, the ministry will be moving these requirements from the expiring site-specific standard order to a different regulatory instrument, Environmental Compliance Approvals. The Environmental Compliance Approvals will include the committee's minimum meeting frequency and other meeting requirements.

   The Community Liaison Committee requirements are the same for all the facilities in the sector but operate under their own Terms of Reference.

3. **Recommendation that Algoma should have an appropriate air ambient monitoring network and real-time sampling to validate emission reductions.**
   Response: There is currently a monitoring network in the vicinity of Algoma and the ministry is currently reviewing the request to examine air monitoring in Sault Ste. Marie, but a

Source: https://ero.ontario.ca/index.php/notice/019-2526 (2 comments)

Also see: ERO 019-2301 (27 Public comments): https://ero.ontario.ca/notice/019-2301/comments

BATCHEWANA FIRST NATION RESPONSE TO ERO 019-2526

3. **Recommendation that Algoma should have an appropriate air ambient monitoring network and real-time sampling to validate emission reductions.**
Response: There is currently a monitoring network in the vicinity of Algoma and the ministry is currently reviewing the request to examine air monitoring in Sault Ste. Marie, but a definitive date for the completion of the review has not yet been set. The ministry is assessing what more can be done through its work to develop a technical standard.

4. **Recommendation that the funds for these projects should have been previously committed and a portion of the current government funding should be reallocated to these environmental projects.**
Response: The provincial funding provided as a repayable loan through the Ministry of Energy, Northern Development and Mines was tied to very specific capital projects with no ability to reallocate them.

5. **Concerns that these facilities are causing health impacts in the community.**
Response: When facilities emit contaminants above a general air standard, it does not necessarily mean that adverse effects will occur, however the risk increases as concentrations increase. In particular, levels of benzene and benzo[a]pyrene from these facilities will continue to be the focus for reduction over time.

   While extending the existing site-specific standards will not drive additional reductions in emissions during the extension period, other work continues with the facilities to further reduce emissions of contaminants such as benzene, including what investments are possible to reduce Benzo[a]Pyrene.

   The ministry recognizes the efforts made by the integrated iron and steel companies to date to meet their site-specific standards. Some improvements have been achieved, and the ministry will continue to assess what else can be done and to seek further reductions in emissions, with the goal of continuous improvement to reduce health and environmental risk, through its work on a technical standard for the sector.

   Anyone with health-related questions related to environmental exposures should contact their local Public Health Unit or the ministry's Technical Assessment and Standards Development Branch.

6. **Batchewana First Nation is concerned with environmental and health issues emanating from Algoma Steel. Batchewana First Nation will not endorse this request and will correspond with the ministry to discuss next steps.**
Response: The ministry continues to work with the public, municipalities, First Nations, environmental groups and industry to drive strategies that better protect air quality. The ministry recognizes that further efforts are needed to reduce risks to the environment and human health and will continue discussions with the First Nation community on the long-term actions to improve air quality.

   In the meantime, this extension will allow the company to continue their work to reduce emissions and ensure there is a clear compliance approach in place to address issues.

Source: https://ero.ontario.ca/index.php/notice/019-2526

OCTOBER 18, 2019 EMISSIONS EVENT (PIPE BURST-FLARING)

Why is Algoma Steel lighting the west end with flared coke oven gas?

The problem should be fixed by early next week, the company says

about 14 hours ago By: David Helwig

SooToday reader Janice Anderson snapped this photo of huge flames over Algoma Steel early in the morning of Friday, Oct. 18, 2019. Photo used by permission.

A tiny, ruptured steam line at Algoma Steel is responsible for the spectacular gas flares that have perioidically lit up the Sault's west end over the past week.

Brenda Stenta, the steelmaker's manager of communications and branding, says the flaring should stop early next week.

"On Friday, Oct. 18, 2019, we had a one-inch steam line rupture in the by-products plant which resulted in a loss of power to some related processes," Stenta tells SooToday.

"As per protocol, the cokemaking battery flares were lit – two per battery."

"We have three batteries. The flares are a necessary safety mechanism for the safe combustion of surplus fuel when the process is unable to recycle the fuel in normal course through the boilers and the cogeneration plant. Once power was restored the battery flares were extinguished," she said.

"The coke oven gas stack is flared periodically when coke oven gas exceeds operating demand as is the case currently while the booster that distributes coke oven gas to the boilers gets repaired."

Stenta added: "When the booster comes back online early next week, the flare will not be required."

The Ontario government's hourly air quality measurements for Sault Ste. Marie show spikes in fine particulate matter (PM2.5) corresponding to major flares reported by our readers on Friday, Oct. 18 and Sunday, Oct. 20, but Stenta insists particulate levels aren't related to the coke oven flares.

"While particulate matter emissions were somewhat elevated on Friday during the outage (particulate matter - PM10 24-hour rate at our Wallace Terrace air monitoring station measured 12 micrograms per cubic metre that day, and peaked at 44), they have since returned to normal levels."

"Today the total PM10 24 hour rate is measuring at 0 micrograms per cubic metre. The Ministry of Environment, Conservation, and Parks ambient air quality criterion for PM10 is 50 micrograms per cubic metre for a 24-hour period, which is based on a Canada-wide standard," Stenta said.

Source: https://www.sootoday.com/local-news/why-is-algoma-steel-lighting-the-west-end-with-flared-coke-oven-gas1763598#:~:text=A%20tiny%2C%20ruptured%20steam%20line,end%20over%20the%20past%20week.&text=%22As%20per%20protocol%2C%20the%20cokemaking,lit%20%E2%80%93%20two%20per%20battery.%22

ALGOMA

Environmental incidents resulting from operations

October 19	Cokemaking	Stack emission #7 battery, 20 events	Ovens to be inspected
October 19	Cokemaking	Stack emission #8 battery, 25 events	Ovens to be inspected
October 19	Cokemaking	Stack emission #9 battery, 15 events	Ovens to be inspected
October 18	By-Products	400 lb steam line rupture caused a power loss in the BP resulting in the south raw liquor tank and tar decanters to overflow and entered storm sewers.	Area was cleaned up, storm sewer was bermed to prevent further inflow and power was restored.
October 18	By-Products	400 lbs steam line rupture, power loss cause loss of suction, battery flares lit. SAC Number 0008-BH3DGT	Repairs on-going, power restored, suction re-established.
October 18	Cokemaking	Stack emission #7 battery, 4 events	Ovens to be inspected
October 18	Cokemaking	Stack emission #8 battery, 4 events	Ovens to be inspected
October 18	Cokemaking	Stack emission #9 battery, 4 events	Ovens to be inspected
October 17	Cokemaking	Stack emission #7 battery, 28 events	Ovens to be inspected
October 17	Cokemaking	Stack emission #8 battery, 25 events	Ovens to be inspected
October 17	Cokemaking	Stack emission #9 battery, 16 events	Ovens to be inspected
October 16	Cokemaking	Stack emission #7 battery, 23 events	Ovens to be inspected
October 16	Cokemaking	Stack emission #8 battery, 23 events	Ovens to be inspected

Photo 22: A portion of ASI Process Upset Table highlighting the event on October 18, 2019.

Note: There was no acknowledgement of the event in the following ACLC #30 meeting minutes on September 08, 2019 despite a steam line rupturing which caused a power loss in the BP (By-products Plant) resulting in the south raw liquor tank and decanters to overflow and enter the storm sewers. There was no acknowledgement of public complaints or discussions despite media coverage on the event. The MECP is still investigating the incident (**Abatement Incident Report**: IR # 4453-BH3QNU).

PORTION OF AN E-MAIL FROM MECP RON DORSCHT ON DECEMBER 15, 2020

The company's request for a site-specific standard for benzo-a-pyrene was deferred until they achieved compliance with their site-specific standard order for suspended particulate matter, as reducing particulates also reduces BAP emissions.

Algoma Steel reached compliance with the visible emission limits of their site-specific standard order for suspended particulate matter in August 2017. The BAP site-specific standard and order were issued in November 2017.

4.) What is the purpose of ASI's Process Upset Table and why does AMD and Stelco not have one?

The Process Upset Table (found at the Environment/Reports/Recent Environmental Incidents link on the Algoma Steel website) is a requirement under Environmental Compliance Approval 3614-82DLFY for the operation of the No. 6 Blast Furnace (issued March 31, 2010). The condition was included to require the company to involve and inform the public on the environmental performance of the facility.

Environmental Compliance Approvals are site-specific. Environmental Compliance Approvals for AMD and Stelco would have their own site-specific requirements.

5.) Is ASI mandated or required by an order or any conditions that they must report all environmental incidences on their Process Upset Table? Is the reporting at their discretion including reporting stack opacity violations?

Algoma Steel is required to publicly report all incidents at their facility as required by condition 11 of Environmental Compliance Approval 3614-82DLFY.

Condition 11 states: "The Company shall inform the public by posting on the Company's corporate website all incidences with environmental impacts related to process upsets, failure of any equipment, including failure of any air pollution control equipment, in the Facility within twenty-four (24) hours of occurrence of the incidence or within a time period directed by the District Manager."

6.) Are Provincial Orders subject to FOIs?

Orders are public documents and are available for public disclosure where they are not already available on the Environmental Registry.

7.) Has the MECP concluded its investigation into the emissions event at ASI on October 18, 2019 (flaring of the batteries from a pipe bursting)? What is the MECP file No. for this incidence?

The investigation of the October 2019 event is ongoing. The abatement Incident Report for this event is IR # 4453-BH3QNU. Note that the Incident report is not available for public disclosure while the investigation remains in progress.

8.) Has the MECP conducted any other benzene monitoring at ASI outside ASI's property line (similar to MOE 2006 special air study)?

The ministry conducted a co-located audit study at the Wallace Terrace station from 2008 to 2009 that included VOC monitoring for benzene. The purpose of the study was to understand discrepancies in data collected by the ministry as compared to the data reported by Algoma Steel's consultant.

9.) What years where the Wallace Terrace and Patrick St. Stations installed at their current locations?

RECENT EMISSIONS EVENT IN 2020

Thick smoke seen over Algoma Steel (video, 4 photos)

We'll post additional information as it becomes available

Feb 27, 2020 1:08 PM By: SooToday Staff

SooToday has received a number of reports of thick, dark smoke coming from the area of Algoma Steel.

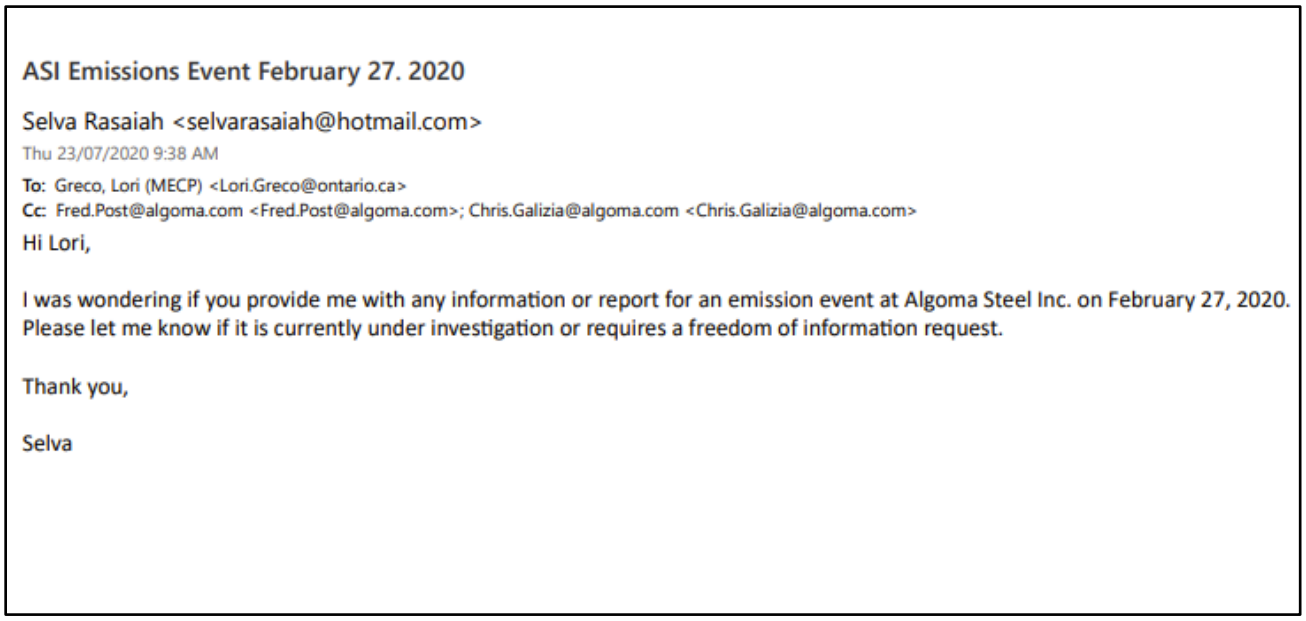
The accompanying reader submitted photos and vdeo were taken shortly after 11 a.m. today.

SooToday has reached out to Algoma Steel for comment and will post additional information as it becomes available.

https://www.sootoday.com/local-news/thick-smoke-seen-over-algoma-steel-video-4-photos-2123668

***Note:** This event was caused by the dumping of excess iron onto wet ground. There was no discussion or acknowledgement of the emissions or public complaints about this event in the Algoma Community Liaison Committee (ACLC) meeting #32 on March 10, 2020 following the event despite media coverage and acknowledgement by ASI on their Process Upset Table.

E-MAILS REQUESTING INFORMATION FOR IRON EMISSION ON FEBRUARY 27, 2020



ASI Emissions Event February 27. 2020

Selva Rasaiah <selvarasaiah@hotmail.com>
Thu 23/07/2020 9:38 AM

To: Greco, Lori (MECP) <Lori.Greco@ontario.ca>
Cc: Fred.Post@algoma.com <Fred.Post@algoma.com>; Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>

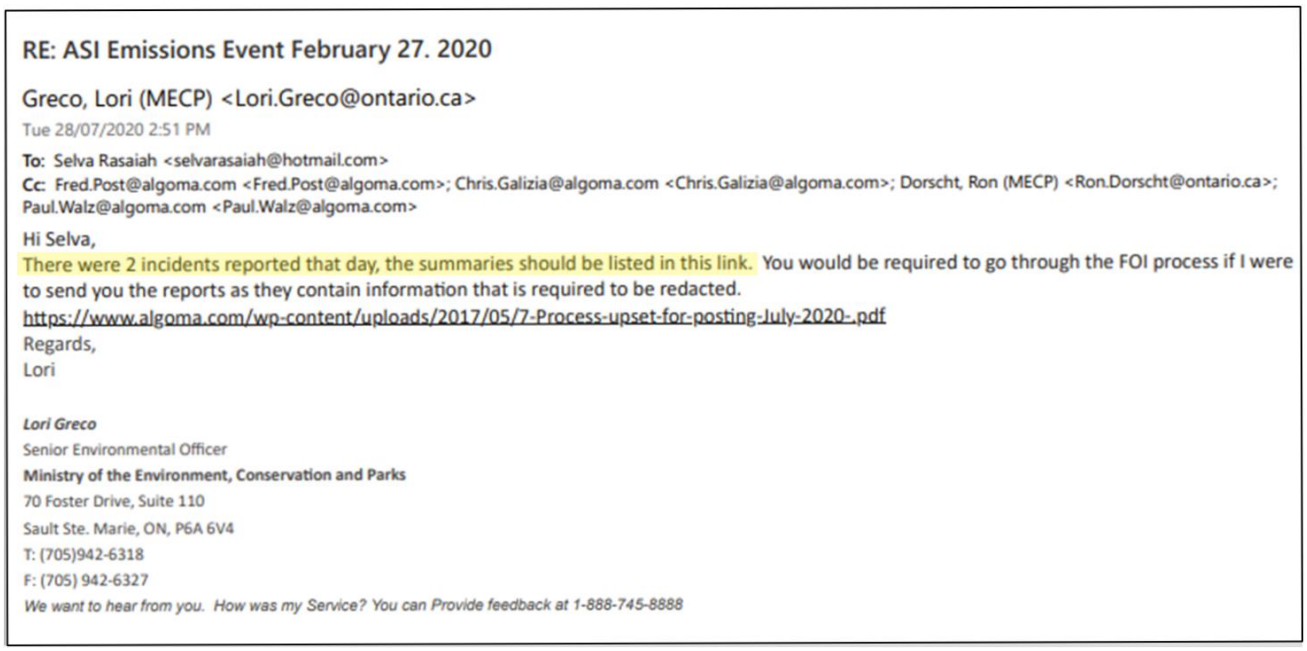
Hi Lori,

I was wondering if you provide me with any information or report for an emission event at Algoma Steel Inc. on February 27, 2020. Please let me know if it is currently under investigation or requires a freedom of information request.

Thank you,

Selva

Photo 23: E-mail to MECP Lori Greco requesting more information.



RE: ASI Emissions Event February 27. 2020

Greco, Lori (MECP) <Lori.Greco@ontario.ca>
Tue 28/07/2020 2:51 PM

To: Selva Rasaiah <selvarasaiah@hotmail.com>
Cc: Fred.Post@algoma.com <Fred.Post@algoma.com>; Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>; Paul.Walz@algoma.com <Paul.Walz@algoma.com>

Hi Selva,
There were 2 incidents reported that day, the summaries should be listed in this link. You would be required to go through the FOI process if I were to send you the reports as they contain information that is required to be redacted.
https://www.algoma.com/wp-content/uploads/2017/05/7-Process-upset-for-posting-July-2020-.pdf
Regards,
Lori

Lori Greco
Senior Environmental Officer
Ministry of the Environment, Conservation and Parks
70 Foster Drive, Suite 110
Sault Ste. Marie, ON, P6A 6V4
T: (705)942-6318
F: (705) 942-6327
We want to hear from you. How was my Service? You can Provide feedback at 1-888-745-8888

Photo 24: E-mail from MECP Lori Greco stating there were two incidences that should be noted.

February 28	Cokemaking	Stack emission #7 Battery, 20 events	Ovens to be inspected	
February 28	Cokemaking	Stack emission #8 Battery, 20 events	Ovens to be inspected	
February 28	Cokemaking	Stack emission #9 Battery, 22 events	Ovens to be inspected	
February 27	Ironmaking	Dumped iron ladle #1 dump producing visible emission.	Avoid dumping on frozen / wet material. Transwest prepped and inspected dumps prior to	

ALGOMA
STEEL INC.
Environmental incidents resulting from operations

			dumping.	
February 27	Cokemaking	Stack emission #7 Battery, 11 events	Ovens to be inspected	
February 27	Cokemaking	Stack emission #8 Battery, 27 events	Ovens to be inspected	
February 27	Cokemaking	Stack emission #9 Battery, 13 events	Ovens to be inspected	
February 26	Cokemaking	Pushing emission #9 Battery, #39 Oven	Inspected next oven to push and continued operations	

Photo 25: ASI Process Upset Table showing only one incident from February 27, 2020

End of pipe solutions don't currently exist nor are traditional air emission control measures such as bag houses or electrostatic precipitators being implemented elsewhere in the world because they are not technologically feasible for this application. It is generally accepted that the best means of controlling stack opacity is through rigorous oven maintenance and eventually wall replacements. It was explained that the company is continually looking at using the best available technology and utilizing best operating practices to reduce stack opacity.

One member inquired about the relationship between percent opacity and total loading of particulate and inquired whether one metric was more appropriate than the other. This question will be raised with the Standards Development Branch for discussion at a future meeting.

5. **Public Complaints**

Public complaints regarding particulate and odour from the last quarter were noted. There were 3 public complaints regarding odour on January 10th, January 21st, and February 3rd. None of the complaints were specifically attributed to abnormal operations or particular incidents at Algoma.

6. **Industry / Technical / Site Specific Standard**

The MECP has commenced discussions with the iron and steel sector on new Industry / Technical / Site Specific Standards for multiple air contaminants that will replace the existing Standards when they expire. The potential contaminants could include Particulate, B(a)P, Benzene, SO2, Metals (Iron, Nickel, Manganese and Chromium VI). The process is led by the MECP and is expected to take 3-4 years to develop the new technical standards. The MECP

2

Photo 26: ACLC #32 minutes not discussing the event despite media coverage and reported by ASI

CTV News Northern Ontario – March 09, 2019

Source: https://northernontario.ctvnews.ca/video?clipId=1632086

PORTION OF MECP INCIDENT REPORT (1433-BA4LCB) FOR MARCH 09, 2019 EVENT

Telephone: (705)945-4568, FAX: (705)945-2972, email: fred.post@algoma.com
Client #: 5754-4JDRLV, Client Type: Corporation, NAICS: 331111

Site(s)

Site Details
Algoma Steel Inc. - 105 West Street Address: 105 West St, Sault Ste. Marie, City, District of Algoma, P6A 7B4 District Office: Sault Ste. Marie GeoReference: Map Datum: NAD83, Zone: 16, Accuracy Estimate: 1-10 metres eg. Good Quality GPS, Method: Survey, UTM Easting: 701613, UTM Northing: 5154576, , LIO GeoReference: Zone: 16, UTM Easting: 702519.25, UTM Northing: 5155183.0, Latitude: 46.519733, Longitude: -84.35969 Sewage Works Number: 0000040006 Site #: 1754-4NVMP9, NAICS: 331110

Incident Summary:
Algoma Steel: black particulate from coke oven battery

Initial Incident Description (as reported):

Created: Akiko Date (Spills Action Centre) - 2019/03/09 10:38:05 AM

Caller reports a power outage to the entire facility. Emission control system is not operating. There is no production, but there are coke oven battery emissions. There will be a heavy emission of coal and coke dust, (black particulate) which will be impacting the neighbourhood. Started 30 minutes ago. Unknown how long it will emitting, they are working on restoring power now and some parts have been restored already. Caller will update SAC when power is restored.

SAC received a complaint from a resident about seeing a lot of black smoke. IR#5767-BA4L9C

11:09- Chris Graham - Algoma - [redacted] to SAC (JA): reports that at power outage, all 3 coke oven batteries lost power and steam and had the inability to process any volatiles coming off the coal. They then had to bypass causing a black plume. There is a constant rolling fire on top of the batteries. Lori Greco who has advised them that she will be responding to site in about 45 minutes. Caller will have Lori update SAC with findings. Algoma will also be updating SAC.

11:43-Jerry Suurna to SACbt- Jerry is updating that power has been restored to the coke batteries at 10:45. Efforts to get operations back to normal had already begun before power was restored. Emissions are still ongoing, however they have been getting better. They will advise SAC when there are zero emissions and everything is fully under control. All efforts possible are being taken to ensure they get back to normal operation- expected to be sometime this afternoon.

11:48 -- MECP-SSM Lori Greco to SAC(ad): Lori advises that Algoma Steel also contacted her and told her about the incident and requested her to attend. Lori does not believe her presence will be necessary. They will also be updating her on the situation.

12:09 Ron Dorscht (SSM MECP) to SAC(jt)
- The incident has received a lot of media attention
- ERP to be paged

12:11 SAC(ad) to ERP: Lori Greco was briefed. She will call SAC when she gets to the office.

13:08- Lori Greco (ERP) to SAC (JA): reports that she is at the office and heading to site, ETA to site 13:20 and will update SAC later.

13:44 -- PEOC to SAC(ad): requesting the latest update. SAC advised that the ERP has not arrived on site yet. No evacuations have been initiated. It has not been assessed as a high health risk situation.

Page 2

PORTION OF A LETTER FROM CHRIS GALIZIA (ASI) TO MECP LORI GRECO FOR MARCH 09/19 EVENT

Main Water Filter Plan

During the power outage, the MWFP could have experienced a bypass discharging untreated effluent to the St. Mary's River. The power outage last from 9:39AM until 10:27AM, a duration of approximately 48 minutes. Based on historical events, the water level of the primary basin raises approximately 1.7% per minute during a power outage until the primary basin reaches 84% at which time a bypass would be initiated. The water level in the basin at the time of power loss was 48.5% and at 9:59AM it is believed the filter plant would have begun to bypass. This bypass would have lasted until 10:27AM for a total bypass time of 28 minutes. Prior to the outage, effluent flow was recorded at 11,520 m^3/hour and decreased to 8,820 m^3/hour once power was restored. Based on this information, the expected flow rate out of the filter plant during the time of a bypass would be 10,170m^3/hour. Combined with the duration of the bypass, the expected volume of untreated effluent would be 4,780 m^3.

At 11:15AM, Environment Control collected samples of water from the MWFP wet well. These samples would be representative of effluent quality if a bypass occurred. At the time of sample collection, water levels in the primary basin had returned to normal. The location of a bypass outflow was inspected and appeared to be dry, indicating that a bypass may not have occurred. At 11:30AM, the St. Mary's River was inspected downstream of the MWFP discharge location and there was no visual evidence of a bypass (i.e. water discolouration, sheening etc.).

Water samples collected on the day of the event were sent to Testmark Laboratories for a full MISA analysis on March 11th, 2019. Using the previously calculated effluent volume of 4,780 m^3, the loadings for a bypass period are as follows:

Parameter	Concentration (ppm)	Loading (kg)
Phenol	0.003	0.014
Oil & Grease	3	14
Ammonia	1.66	8
TSS	3.3	16
Benzene	1.2 ppb	0.0057
Benzo(a)pyrene	<.009 ppb	<0.00043
Naphthalene	0.19 ppb	0.00091
Lead	0.0056	0.027
Zinc	0.126	1
Total Cyanide	0.09	0.4

Composite water samples from March 9th have also been sent to Testmark for analysis. When the final report is received, those results will be available.

PORTION OF MECP CERTIFICATE OF ANAYLSIS – PARTICULATE SAMPLE FOR MARCH 09/19 EVENT

Ministry of the Environment
Laboratory Services Branch
125 Resources Rd.
Etobicoke ON M9P 3V6
Tel: (416) 235-5743
Fax: (416) 235-5744

Ministère de l'Environnement
Direction des services de laboratoire
125, Chemin Resources
Etobicoke ON M9P 3V6
Tél: (416) 235-5743
Téléc: (416) 235-5744

Ontario

SAULT STE. MARIE
MINISTRY OF THE ENVIRONMENT
AND CLIMATE CHANGE
MAY 07 2019
RECEIVED

(416) 235-6077

CERTIFICATE OF ANALYSIS

Pursuant to
s. 5 & s. 175, Environmental Protection Act R.S.O. 1990, c. E.19
s.1 & s. 116, Ontario Water Resources Act R.S.O. 1990, c. O.40
s. 1 & s. 51, Pesticides Act R.S.O. 1990, c. P.11
s. 38, Fisheries Act R.S.C. 1985, c. F-14
s. 658 & s. 688 Canada Shipping Act R.S.C. 1985, c. S-9
and other legislation as applicable

THIS IS TO CERTIFY THAT the following samples, consisting of solids, liquids or gases or combination of any of them, were analysed at Laboratory Services Branch, and, **THAT** the results of analysis are as shown below;

Submission Number: C256899
Laboratory Sample Number(s): C256899-0002
Originator's Occurrence Number:
Date Sample(s) Received at Laboratory: April 04, 2019

Sample Description & Reported Location: 180 Central Street (snow bank) Bayview area

Submission Number	Field Number	Legal Seals	Description of Sampling Location
C256899-0002	BM01	LP 251593	180 central Street (Snowbank)

Analysis:

C256899-0002 was examined by means of stereoscopic and polarized microscope and Scanning electron microscope with an energy dispersive x-ray analyzer (SEM-EDXRA). Some micro chemical and physical tests were also performed.

Results:

C256899-0002

The sample was comprised of black particulates in a small plastic petri-dish.

-No obvious reaction was observed with addition of acid (HCl 10%)
-No magnetic particles were found
-View under microscope showed:
- Some minerals, around 10 microns to 25 microns in diameter were present
- Trace fly ash, around 25 microns in diameter were found

SEM-EDXRA Analyses (SEMI-QUANTITATIVE):
One spectrum showed the presence of the following elements:
Major (Weight %): O (50%), C (12%), Mg (13%0, Ca (25%)
Likely mainly contain Dolomite

Another spectrum showed the presence of the following elements:
Major (Weight %): O (21%), C (45%), Si (11%), Ca (17%), Mg (4%), Al (3%)
Minor (Weight %): Mg (4%), Al (3%), Na (< 2%)
Likely mainly contained Silicates

Photo 27: Heavy emissions on March 09 @ 10:00 am from Cathcart St. near Marconi Hall

MECP PARTICULATE SAMPLE RELATIVE TO HISTORICAL DEPOSITION

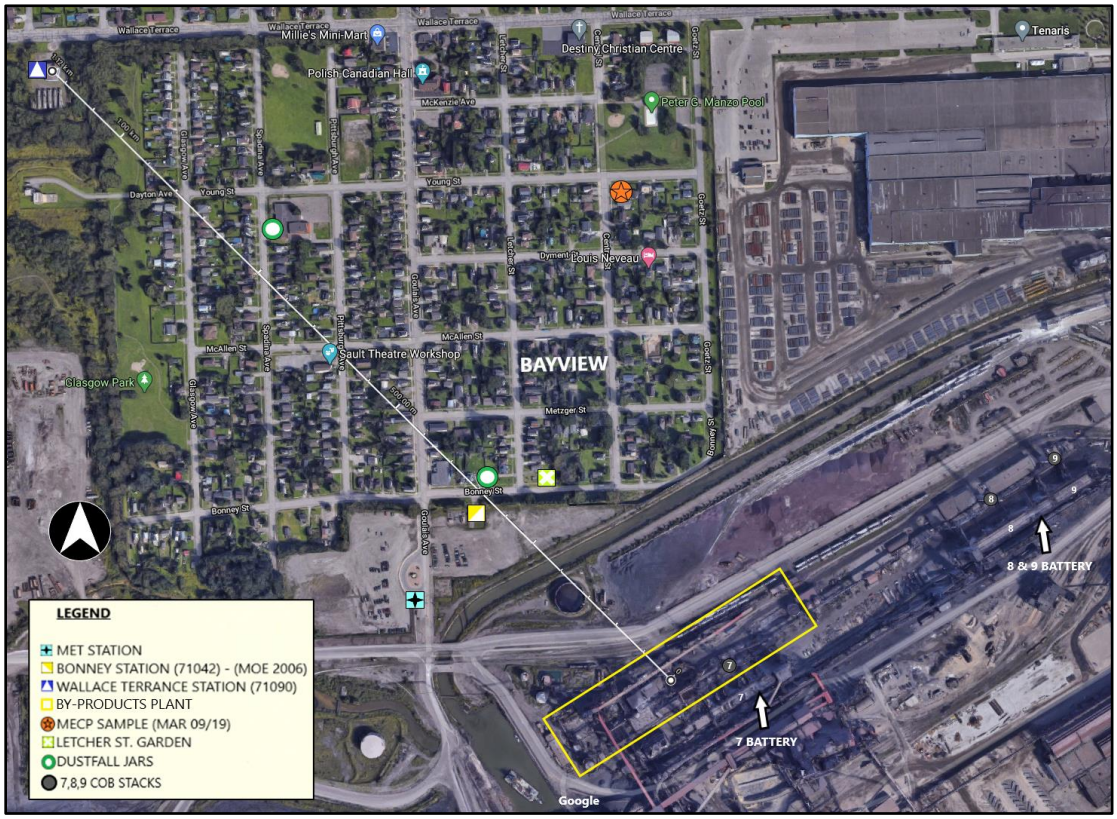


Photo 28: Modified google map showing monitoring devices relative to sources of contaminants.

March 10	Cokemaking	Stack emission #9 battery, 5 event	Ovens to be inspected
March 9	Cokemaking	Pushing emission #9 Battery, #22 Oven	Checked next oven and continues pushing
March 9	Cokemaking	Pushing emission #8 Battery, #78 Oven	Checked next oven and continues pushing

ALGOMA

Environmental incidents resulting from operations

March 9	Cokemaking	Stack emission #7 battery, 9 event	Ovens to be inspected
March 9	Cokemaking	Stack emission #8 battery, 17 event	Ovens to be inspected
March 9	Cokemaking	Stack emission #9 battery, 12 event	Ovens to be inspected
March 8	Cokemaking	Charging emission #8 Battery, #100 Oven	Checked next oven and stopped for more coking time
March 8	Cokemaking	Charging emission #8 Battery, #67 Oven	Stopped pushing for more coking time
March 8	Cokemaking	Stack emission #7 battery, 5 event	Ovens to be inspected

Photo 29: Portion of ASI Process Upset Table in <u>August 2019</u> not showing March 09 emissions event.

ALGOMA

Environmental incidents resulting from operations

March 11	Cokemaking	Charging emission #9 Battery, #29 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #27 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #25 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #05 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #03 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #49 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #45 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #47 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Charging emission #9 Battery, #51 Oven	Charged oven to atmosphere to reduce risk due to Oxygen/Gas ratio
March 10	Cokemaking	Stack emission #7 battery, 15 events	Ovens to be inspected
March 10	Cokemaking	Stack emission #8 battery, 19 events	Ovens to be inspected
March 10	Cokemaking	Stack emission #9 battery, 5 events	Ovens to be inspected
March 9	Facility Wide	Plant wide power failure, flares on Coke Batteries ignited, loss of power to baghouses	Dispatched emergency EMTs to repair electrical issue, followed emergency shut down procedures
March 9	Cokemaking	Pushing emission #9 Battery, #22 Oven	Checked next oven and continues pushing

Photo 30: ASI Process Upset Table showing discharges of coking gas to the atmosphere post March 09

E-MAIL TO MECP RON DORSCHT REGARDING PUBLIC COMPLAINTS (DECEMBER 23, 2020)

ASI Public Complaints Investigations (Reporting)

Selva Rasaiah <selvarasaiah@hotmail.com>
Wed 23/12/2020 11:28 AM

To: Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>
Cc: brian.cameron@ontario.ca <brian.cameron@ontario.ca>; Fred.Post@algoma.com <Fred.Post@algoma.com>; Chris.Galizia@algoma.com <Chris.Galizia@algoma.com>; Paul.Walz@algoma.com <Paul.Walz@algoma.com>; David Trowbridge <dtrowbridge7@gmail.com>; Peter McLarty <pjmclarty@shaw.ca>; Catherine Taddo <c.Taddo@cityssm.on.ca>

2 attachments (2 MB)
ASI2019_PublicComplaints_MECP.pdf; AIRNetworkCompare_ASI_STMARYS_MECP.pdf;

Hello Mr. Dorscht,

Please review the attached documents. The investigation and reporting of public complaints (Environmental Complaints Received table) by ASI should be addressed with the ACLC. There appears to be a discrepancy with ASI concluding that the concerns from the public regarding particulate and odours are not attributed to their operations. The MECP should investigate the potential sources since many other similar issues have been noted but not attributed to ASI operations. Please speak to Mr. Trowbridge (ACLC Public Member) about the concerns of a particulate haze on December 07, 2020 which was determined by ASI to not have resulted from their operations. The two public complaints on ASI's complaint table (July 03, 2019 and August 01, 2019) originate from the east side of ASI's property line. This emphasizes the need to have monitoring devices including a meteorological station on the east side of ASI's property line as suggested for many years by Mr. Trowbridge. Since wind patterns are highly variable and dependent on location, this would aid in identifying the source of the particulate and odour complaints to verify if ASI has been incorrectly identified as the source by the public. Please let me know your comments on this matter.

Thank you,

Selva

Note: There has been **no response** to this e-mail by MECP Dorscht.

DIFFRENCES IN WIND SPEED AND DIRECTION BASED ON LOCATION

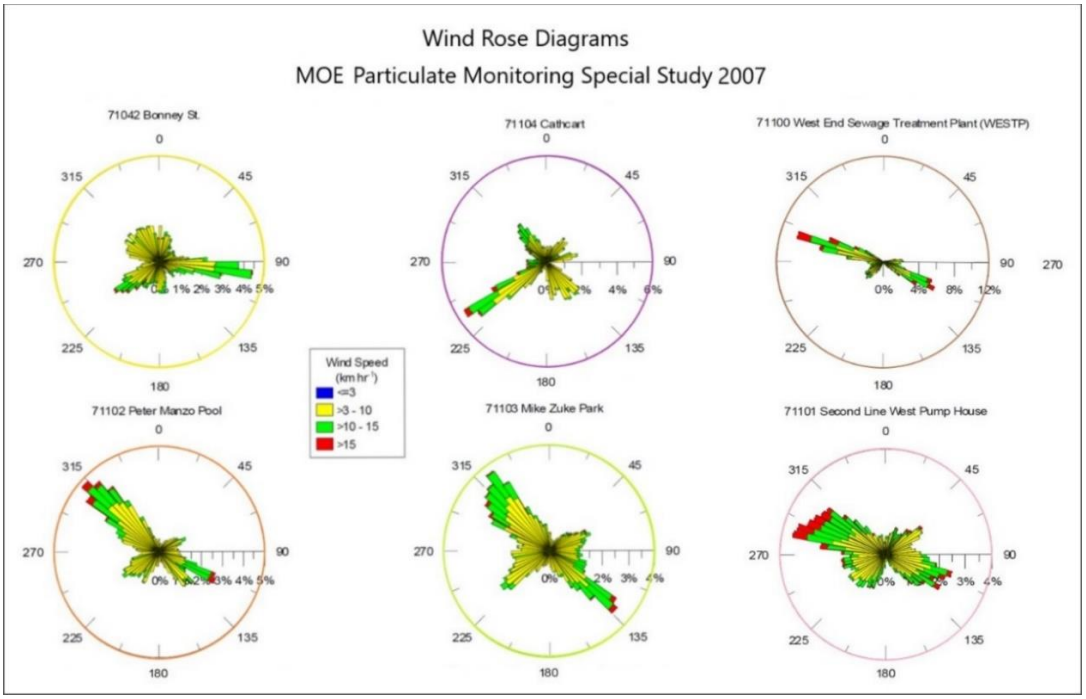


Photo 31: Wind roses diagrams generated from 15 min Aerocet data (page 6, figure 6)

Photo 32: Overlay of four wind rose patterns from MOE Report, Sault Ste. Marie Particulate Monitoring Special Study (2007). Note the significant difference in the east side (Cathcart St.) and west side (Bonney St).

TORONTO STAR (THE STAR) – DIRTY DOLLARS ARTICLE (NOVEMBER 30, 2017)

The cabinet minister beamed as she announced a major corporate gift — $44 million from the public purse to the steel mill on the Hamilton lakeshore.

This financial aid, the proud official said in 2011, would help bankroll major equipment upgrades that would maximize production at the ArcelorMittal Dofasco factory while reducing its environmental footprint.

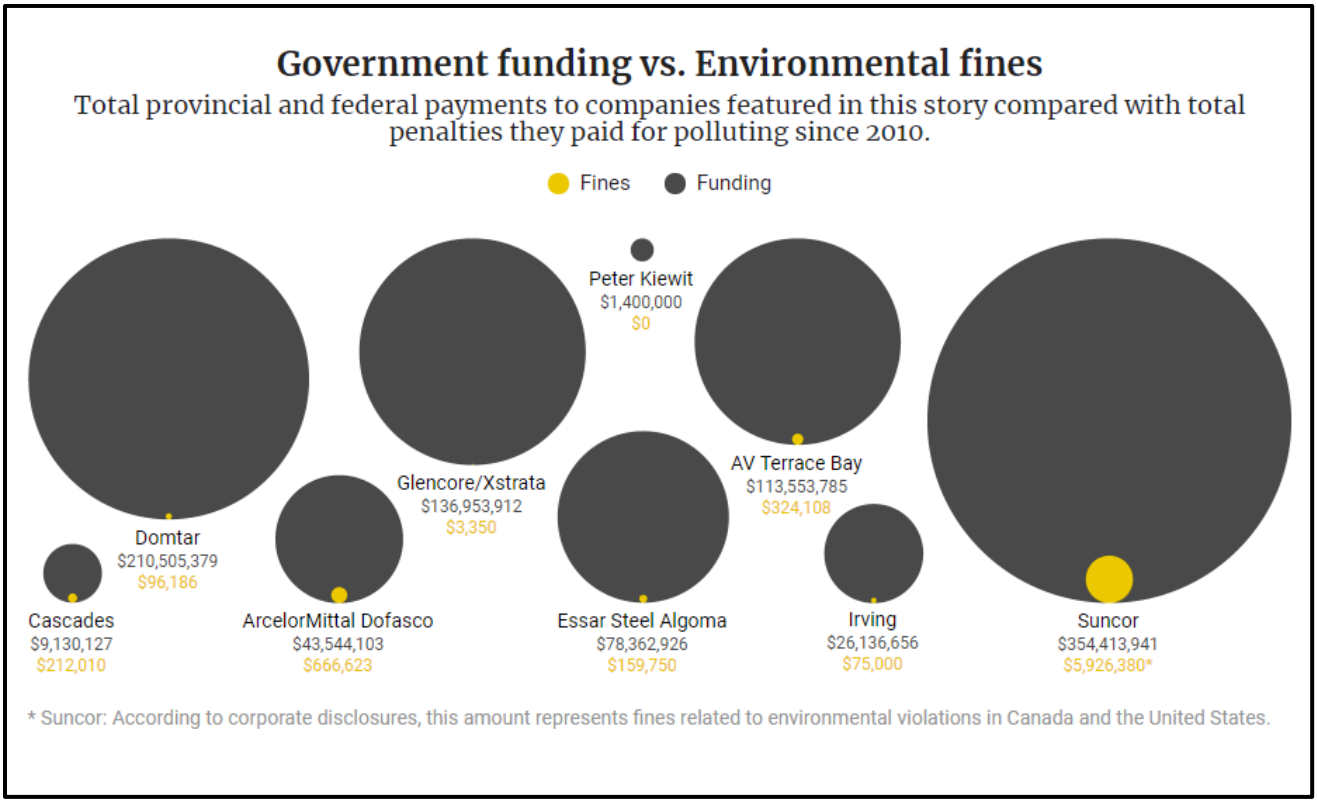
Company officials had already launched a "Blue Skies" campaign to curb pollution in Hamilton's air, and on this celebratory day the CEO was again emphasizing the firm's focus on "environmental protection."

But during the years that followed this multi-million-dollar government handout, the plant was one of Ontario's most prolific polluters, with its smokestack plumes repeatedly violating regulatory limits designed to protect human health and the environment.

Unabated, nearly day after day, the steel factory violated a key emissions standard for four straight years.

What happened in Hamilton, the Star has found, is business-as-usual across Canada: Big companies with poor environmental records are getting rich public payouts.

A Star investigation found that since 2010 more than $2.6 billion in public money has flowed to dozens of companies that had repeated or significant violations of environmental rules designed to keep the public safe. Those companies in total were fined about $15 million. Critics note that, in effect, taxpayers paid their fines, and in many cases, the companies continued to pollute.



Toronto Star. “Dirty Dollars”, November 30, 2017

> Essar Steel Algoma in Sault Ste. Marie said when Ontario introduced opacity legislation “the limit was set well below the industry’s operating capacity.” Steel manufacturing requires a chemical reactions that produce emissions that are “both irreducible and unavoidable,” the company said, and curbing them requires “breakthrough technology which does not exist today.”

Full Story: https://projects.thestar.com/dirty-dollars-pollution/

SOO TODAY ARTICLE – MILLION DOLLAR LOANS FOR ASI UPGRADES (JANUARY 10, 2019)

$150 million in loans to help Algoma Steel Inc. restructure, modernize operations (3 photos)

Funding a step towards steelmaker's eight year, $600 million plan to modernize and expand in wake of U.S. imposed steel tariffs

Jan 10, 2019 7:35 PM By: James Hopkin

The federal government is providing Algoma Steel Inc. $90 million in 'repayable contributions' to help the Sault Ste. Marie steelmaker deal with U.S. tariffs on steel and aluminum.

Ontario has also loaned $60 million to the steelmaking operation to support its restructuring process.

Economic Development Minister Navdeep Bains and Ontario Northern Development Minister Greg Rickford were joined by Sault Ste. Marie MP Terry Sheehan and Sault Ste. Marie MPP Ross Romano at the steel plant Thursday afternoon to make the announcement.

"That $90 million investment from the federal government really reflects the fact that we're standing shoulder to shoulder with the steelworkers and the steel industry, and that investment is to modernize the plant, to make it more competitive," Bains told reporters following the announcement. "It's really about a long term investment to make sure that we secure and maintain over 3,000 jobs in Sault Ste. Marie."

The support comes at a time where steel and aluminum producers are facing tariffs imposed by U.S. President Donald Trump last June.

Ottawa has been fighting for removal of those tariffs - even imposing tariffs of its own on a number of imported U.S. goods - but the levies against Canada are still in place.

Last summer Ottawa announced a tariff relief package that included up to $2 billion for steel, aluminum and manufacturing sectors, with an additional $1.7 billion worth of financing and services earmarked for steel and aluminum industries through the Business Development Bank of Canada and Export Development Canada.

“We’ll continue to engage the U.S. administration,” said Bains. “Prime Minister Trudeau did speak with President Trump about this issue.”

My colleagues Chrystia Freeland, Bill Morneau and myself have been working with our counterparts,” he continued. “This is a priority for our government - we want to see these unjust and unfair tariffs removed.”

Bains says the investment in Algoma Steel Inc. - which is part of the steelmaker’s eight year, $600 million commitment to modernize its operations while expanding capacity and enhancing capabilities for advanced grades of steel - will help the company remain competitive down the road.

“This is about being more competitive,” Bains said. “This is about investing modernization of the plant, which will enable [Algoma Steel Inc.] to succeed in the long run.”

Meanwhile, the provincial government says the $60 million loan to Algoma Steel Inc. will provide pension regulatory relief and eligibility for Pension Benefits Guarantee Fund coverage.

Rickford told reporters that the loan will ensure pensioners access to a safe, reliable pension moving forward.

“We’re creating an opportunity, and a responsible use of taxpayers dollars,” Rickford said. “I think the more important narrative here is the three steps that have essentially facilitated restructuring and put Algoma on a solid fitting.”

The province has also negotiated an agreement that requires Algoma Steel Inc. to kick in $3.8 million per year over the next 21 years in order to identify and remediate past environmental contamination.

“To facilitate restructuring, we walk lock step with Algoma Steel through a process that we think is fair, reasonable and responsible in terms of protecting the environment and a plan for remediation of old sites,” Rickford said.

Algoma Steel Inc. CEO Kalyan Ghosh told reporters that the modernization and expansion program will enable the steel plant to produce new grades of steel for the automobile industry and enhance the capacity and the capabilities of the steel facility’s plate and strip mill.

- with files from The Canadian Press

Source: https://www.sootoday.com/local-news/150-million-in-loans-to-help-algoma-steel-inc-restructure-modernize-operations-3-photos-1191488

COMPARISON OF ASI PUSHING VIOLATIONS TO ALLEGHENY COUNTY FINES FOR US STEEL – (CLAIRTON) 2020

ALGOMA STEEL INC. PUSHING VIOLATIONS (JAN -MAR 2020)

DATE	BATTERY	OVEN#
04-Jan	8	90
04-Jan	9	33
05-Jan	8	85
05-Jan	9	26
05-Jan	9	44
06-Jan	8	18
06-Jan	9	13
06-Jan	9	24
06-Jan	9	26
06-Jan	9	46
07-Jan	8	84
09-Jan	8	64
11-Jan	9	33
13-Jan	8	97
19-Jan	8	97
19-Jan	9	38
24-Jan	8	108
24-Jan	9	25
26-Jan	8	70
28-Jan	8	97
30-Jan	8	68
30-Jan	9	26
31-Jan	8	74

DATE	BATTERY	OVEN#
04-Feb	8	91
24-Feb	8	89
24-Feb	8	71
27-Feb	9	39

DATE	BATTERY	OVEN#
01-Mar	8	70
07-Mar	8	98
08-Mar	9	19
08-Mar	9	29
10-Mar	8	ND
19-Mar	7	51
28-Mar	8	68
29-Mar	8	64

MONTH	FAILS
JAN	23
FEB	4
MAR	8
TOTAL	35

Note: All data was compiled from ASI Process Upset Tables

Photo 33: Number of pushing violations at ASI recorded on their Process Upset Table

Summary of Pushing Violations
(1Q 2020)

Date	BATTERY	OVEN	Average of Push Max Opacity	Average of USS Opacity	Push Severity of Violation	Exceedance Day Penalty	Total Push Penalty
1/2/2020	3	B11	100.00		Major	$0	$2,500
1/2/2020	20	B18	35.00		Low	$0	$1,000
1/2/2020	3	B9	70.00		Major	$0	$2,500
1/6/2020	19	A18	40.00		Moderate	$0	$1,500
1/7/2020	2	B17	30.00		Low	$0	$1,000
1/7/2020	2	B21	30.00		Low	$0	$1,000
1/8/2020	2	B8	100.00		Major	$0	$2,500
1/13/2020	B	A2	80.00		Major	$0	$2,500
1/13/2020	B	B37	80.00		Major	$0	$2,500
1/17/2020	1	A3	60.00		Moderate	$0	$1,500
1/17/2020	C	C22	30.00		Low	$0	$1,000
1/29/2020	13	A11	40.00		Moderate	$0	$1,500
1/30/2020	3	B28	55.00		Moderate	$0	$1,500
1/30/2020	3	C1	30.00		Low	$0	$1,000
2/3/2020	B	A2	65.00	65.00	Major	$500	$2,750
2/12/2020	C	C40	45.00		Moderate	$0	$1,500
2/12/2020	C	C42	55.00		Moderate	$0	$1,500
2/18/2020	13	A30	40.00		Moderate	$0	$1,500
2/20/2020	B	B11	65.00	65.00	Major	$0	$2,500
2/26/2020	2	A20	60.00		Moderate	$0	$1,500
2/26/2020	2	A30	45.00		Moderate	$0	$1,500
2/28/2020	3	A1	55.00		Moderate	$0	$1,500
3/3/2020	14	B30	35.00		Low	$0	$1,000
3/23/2020	B	B14	30.00		Low	$0	$1,000
3/23/2020	B	B16	25.00		Low	$0	$1,000
3/26/2020	3	B13	35.00		Low	$0	$1,000
Total			**51.35**	**65.00**		**$500**	**$41,750**

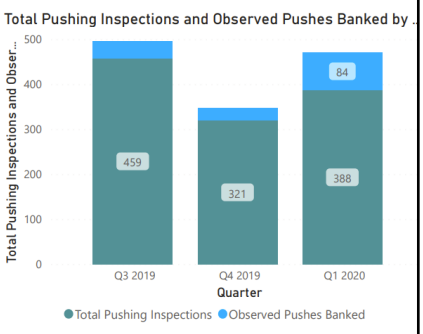


Photo 34: Modified from: *Report by Allegheny Health Department Air Quality Program (May 28, 2020), pg.18

*United States Steel Clairton Plant; Demand for Stipulated Penalties Under Settlement Agreement and Order #190604 Section IX. Stipulated Penalties October 1, 2019 through March 31, 2020 (4th and 1st Quarters)

Note: There is currently no fines issued for pushing violations at ASI.

NORTHERN ONTARIO BUSNIESS – ASI RECIEVES MILLIONS TO CUT GREENHOUSE GASES

New Algoma Steel boss details $300M in capital improvements

Since January 2018, the Sault steelmaker has hired 368 full-time employees

Jun 26, 2019 12:00 PM By: David Helwig

Michael McQuade, Algoma Steel's chief executive officer, spoke at the Sault Ste. Marie Chamber of Commerce's 130th anniversary luncheon on June 25. (David Helwig/SooToday)

Michael McQuade, the former Stelco president appointed in March as chief executive officer of Algoma Steel Inc., has released new details of his company's $300 million in local capital improvments.

"I'm pleased to announce that we are in the midst of some momentous initiatives right now," McQuade said during the Sault Ste. Marie Chamber of Commerce's 130th anniversary luncheon on June 25.

McQuade said the three main projects will take two years to complete at a cost of about $300 million.

"First off, we're building a second ladle metallurgy furnace. This is a steel-refining facility where we use electromagnetic stirring to refine the chemistry and heat up the steel to the optimal temperature for casting," he said.

"We currently only have one ladle-met furnace and it's become a significant bottleneck in our process."

"As we produce more advanced grades of steel, we need more advanced refining capacity and are unable to refine the advanced grades using our older traditional, chemical-refined facility."

"This new facility will deliver another 100,000 tons a year and greatly improve our ability to add more value-added grades. The project team is in place. Construction is underway," McQuade told chamber members.

Algoma Steel's second cornerstone project is an upgrade to its flagship direct strip production complex (DSPC).

"This is the facility where we go from liquid steel to a finished hot-roll coiled sheet in approximately 30 minutes. This complex is the only one of its kind in Canada and reflects the state-of-the-art technology that's being build around the world."

"Current capacity of this facility is about 2.1 million tons per annum and we're taking it to 2.4 million tons."

New DSPC segments were commissioned the first week of June and McQuade said they're performing "exceptionally well."

"We're adding more water cooling capability, more roll grinders and other upgraded elements to increase the volume and improve the reliability and increase our grade capability off of this mill."

The third major capital project underway at the Sault steelmaker is a modernization of the plate mill.

"Our plate mill is the only one in Canada, unique in that it's a combination of plate and strip complex, which gives us the ability to flex production between those two products, depending on customer demand," McQuade said.

The three large projects and other smaller but important ones have been funded with $150 million in loans and grants from the federal and provincial governments.

"Having all of these projects on the go simultaneously is more than we can handle on our own, so we are drawing on external expertise and resources here in Sault Ste. Marie and across the globe."

"It's a great opportunity for our employees and an exciting time for both the company and the community," McQuade said.

Since January 2018, he said the company has hired 368 full-time employees.

"That doesn't include our summer students. On average, about 20 per cent of that group have been hired from outside the community."

McQuade said his company is helping Mayor Chrisitian Provenzano and FutureSSM build the Sault's population to 100,000 by 2037.

This story originally appeared on SooToday.com.

Source: https://www.northernontariobusiness.com/regional-news/sault-ste-marie/new-algoma-steel-boss-details-300m-in-capital-improvements-1540295

ARTICLE FROM NORTHERN ONTARIO BUSNIESS – ASI RECIEVES MILLIONS TO CUT GREENHOUSE GASES

Algoma Steel out to clean the air on coke oven gas

Sault steelmaker receives $4 million from Ottawa to reduce greenhouse gas emissions

Aug 19, 2020 2:30 PM By: James Hopkin

Algoma Steel (Kenneth Armstrong/SooToday)

Algoma Steel has secured approximately $4 million from the federal government to shrink its carbon footprint through the modernization of its tar and light oil plant.

The Sault Ste. Marie steelmaker anticipates that greenhouse gas emissions will be reduced by 596,000 tonnes over the 30-year lifespan of the $16-million project, which received the federal funding through the Government of Canada's Low Carbon Economy Challenge.

Sault MP Terry Sheehan - who was joined by Algoma Steel Chief Executive Officer Mike McQuade for the Aug.18 virtual funding announcement - said the emission reductions expected to be made over the lifetime of the project is equivalent to taking 182,000 motor vehicles off the road for one year.

"This process will not only help reduce greenhouse gas emissions, but it's going to also help improve local air quality, and we know how important that is," said Sheehan. "Algoma Steel's always been a great citizen, but this is going to help them improve local air quality even more."

Algoma will contribute $16 million toward the project, which will see the steelmaker's tar and light oil plant modernized by 2022.

McQuade said the project will inject $16.5 million into the region's economy over its lifetime.

"The funding provided through the low-carbon economy fund made it possible for Algoma Steel to modernize our tar and light oil plant, and shrink our carbon footprint," said McQuade. "Through this project, we'll optimize the capture and removal of tar and lead oils that are suspended within the coke oven gas."

"This in turn reduces the carbon content of the coke oven gas, making it cleaner fuel when recycled in other plant combustion processes. Cleaner combustion will drive an annual reduction of approximately 21,000 tonnes of greenhouse gas emissions, amounting to a cumulative reduction of about 596,00 tonnes over the project's lifetime."

Algoma Steel has already completed two projects in 2019 - rebuilding a blast furnace stove and installing a boiler preheater - with approximately $90 million in federal assistance.

McQuade said the company's investment into the three projects will ultimately result in cutting its greenhouse gas emissions by two per cent annually.

"Combined these projects represent a $47-million investment, and are expected to reduce our greenhouse gas emissions by approximately 79,000 tonnes annually - approximately two per cent of our annual emissions."

The steelmaker looks to be in line with the federal government's pledge to achieve net zero carbon emissions by 2050.

"As a member of the Canadian Steel Producers Association, we aspire to achieve net zero carbon emissions by 2050. It's an ambitious but important goal - one that requires the support of governments, research partners, customers and our supply chain along the way," said McQuade. "The tar and light oil projects bring us one step closer to that goal."

- SooToday

Source: https://www.northernontariobusiness.com/industry-news/manufacturing/sault-steelmaker-receives-4-million-from-ottawa-to-reduce-greenhouse-gas-emissions-2649028

Typical or normal quench tower (quenching) emissions