



Community Liaison Committee Meeting #30

September 10th, 2019

Agenda

1. Review of June 4th, 2019 meeting notes
2. Membership Items
3. Site Specific Standards / Technical Standards
4. Noise Abatement
5. Environmental Compliance Approval updates
6. Legacy Environmental Action Plan
7. Climate Change
8. Public Open House
9. Next Meetings

Membership Items

Current Members and Alternates

Representation

Algoma Steel
Ministry of Environment, Conservation & Parks
Public
Public
SSM Tribe of Chippewa Indians
Algoma Public Health
Chippewa County Health Dept.
Batchewana First Nations
City of Sault Ste. Marie
United Steel Workers Local 2251
St. Mary's River RAP Coordinator

Primary Member

Fred Post
Lori Greco
David Trowbridge
Patt Marquis
Kathie Brosemer
Kara Flannigan
Suzanne Lieurance
Dan Sayers Jr.
Catherine Taddo
Reginald Dunn
Lisa Derickx

Alternate

Chris Galizia
Ron Dorscht
Peter McLarty

Chris Spooney

Maggie McAuley

Site Specific Standard for Particulate and BaP

- On March 27th, 2015 Algoma received a Site Specific Standard for Particulate which sets specific emission limits in cokemaking:
 - Certified observers (per EPA Method 9 and Method 303)
 - 5 days per week, 10 Saturdays and 10 Sundays each year
 - Must observe daily per battery: 4 pushes, 5 charges, all lids, all doors, and all standpipes
 - Must make operational adjustments if over the daily limits and notify MECP

Site Specific Air Quality Standard for Particulate & B(a)P

Identifies Key Performance Indicators related to Cokemaking Emissions:

- average intensity of pushing emissions
- average duration of charging emissions
- % lid leaks
- % off-takes leaks
- % door leaks

Conformance calculated daily for each battery

New limits set July 2015. Progressive, annual reduction.

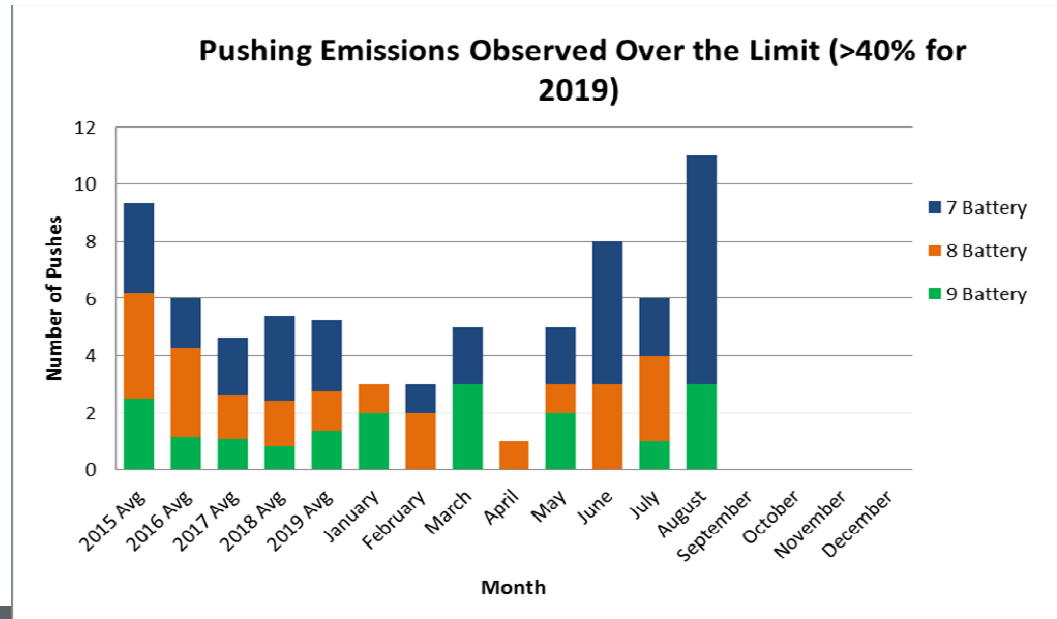
Implementation Date	30 day rolling average %			Charging Emission	Pushing Opacity (%)
	Doors	Lids	Off-takes		
July 2, 2015	38	0.8	25	12 sec	50
Jan 1, 2016	22.5	0.8	15	12 sec	50
Jan 1, 2017	7	0.8	4.2	12 sec	50
Jan 1, 2019	7	0.8	4.2	12 sec	40
Jan 1, 2020	4	0.4	2.5	12 sec	30



Continued Success through Operating Adjustments

To date all corrective actions have been successful at reducing pushing opacity below the limit.

Limit:
50% 2018
40% 2019
30% 2020

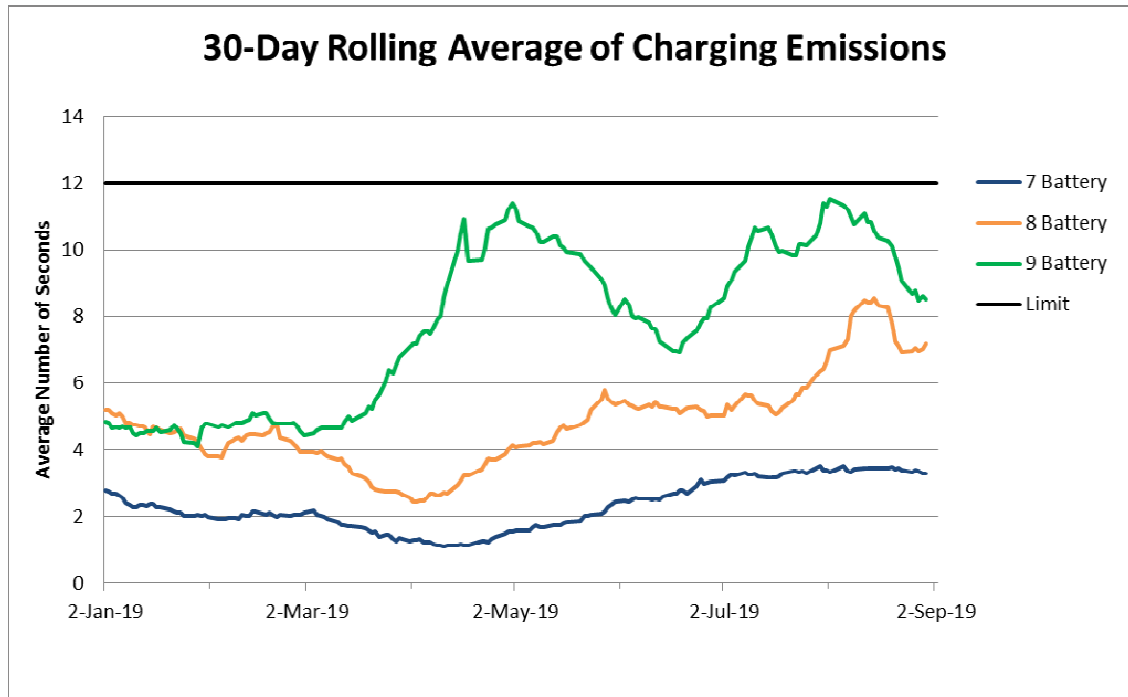


Corrective actions include:

- Taking cross-wall temperature readings to identify problem flues
- Cleaning the flues, pins, orifices, risers, flex hoses, venturies and bus flues
- Increasing oven temperature
- Repairing adjacent ovens and ensure proper heating of the shared walls
- Adjusting fuel or air to improve combustion
- Extending coking time



Charging Emissions Below Limit



Preventative Measures include:

Adjusting carbon scraper bar

Decarbonizing standpipes, goosenecks and charge holes

Cleaning goosenecks, sleeves to the collector main, and steam jets

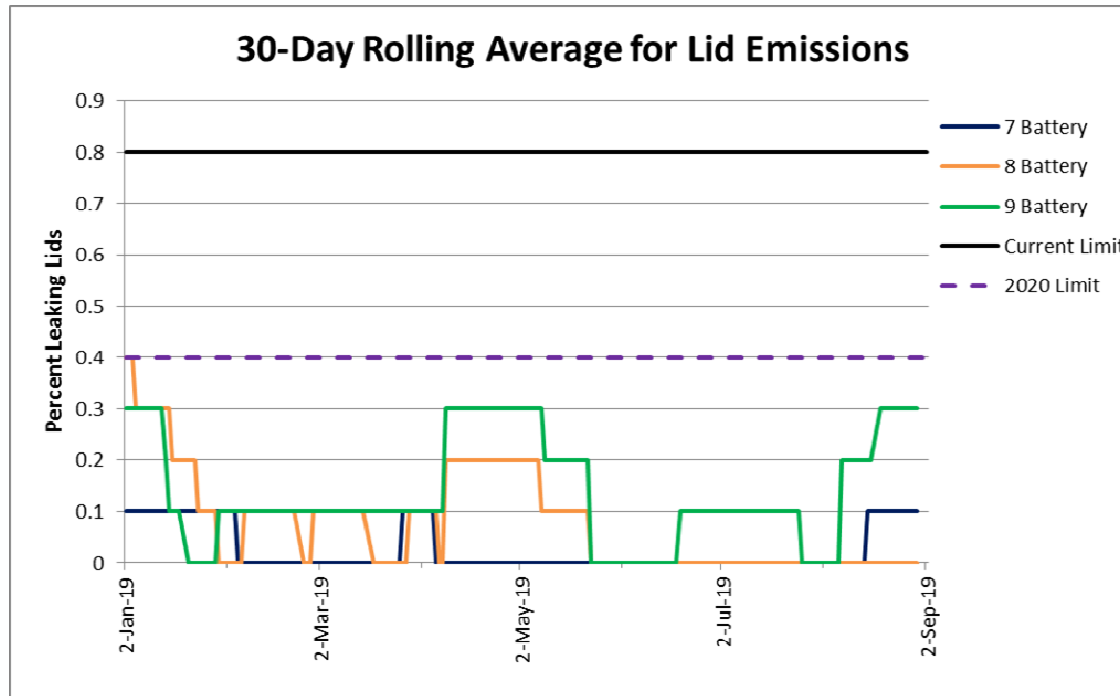
Replacing drop sleeve donuts, bellow bags, and carbon seals

Adjusting coal feed systems to optimize coal charging volume

Leveling charge hole bases to ensure proper elevation and tight seal



Lid Emissions Below Limit



Preventative Measures include:

Applying lid sealant immediately after charging an oven and whenever emissions are observed

Replacing damaged or cracked lids

Repairing, leveling and grouting charge hole bases to ensure proper seal



Off-take Emissions Below Limit

Preventative measures include:

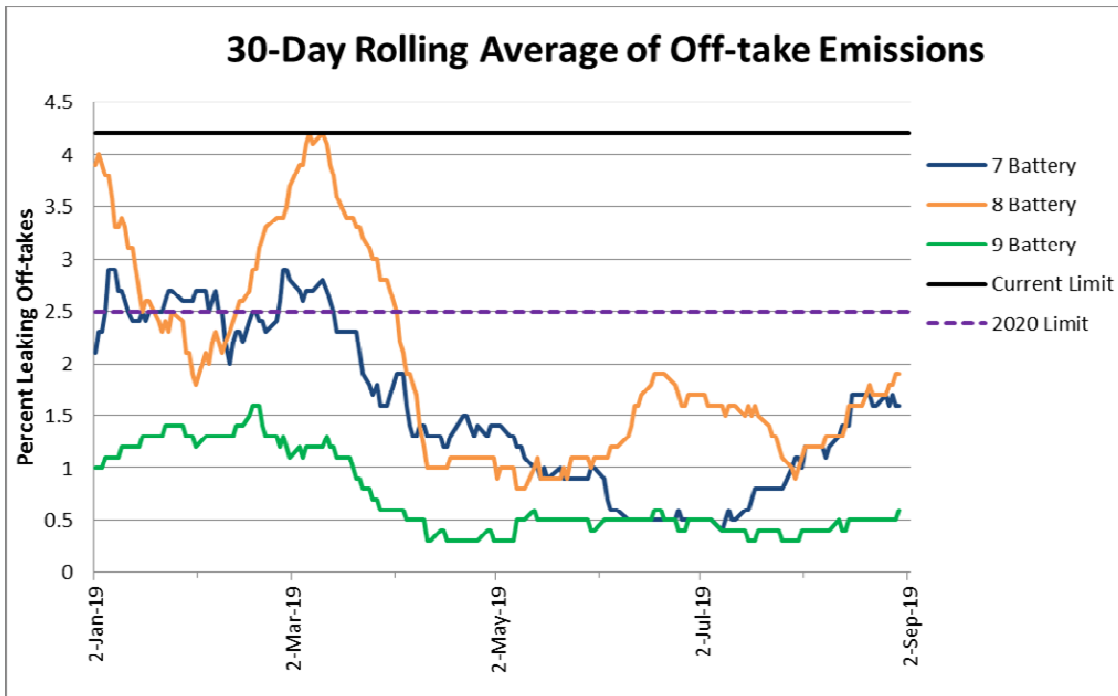
Replacing the soft seal and adjusting the cap

Cleaning the gooseneck, sleeve to collector main, and steam jet

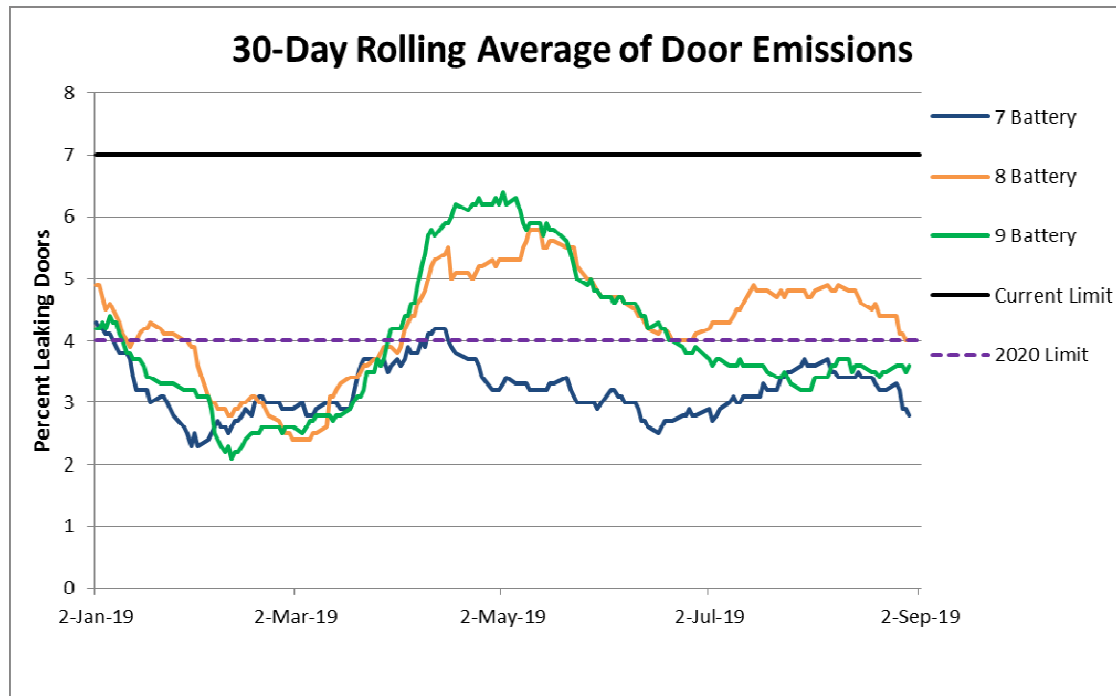
Re-packing collar or base of the pipe with refractory

Applying masonry seal to small cracks until welding can be completed

Replacing the standpipe at the end of its lifecycle



Door Emissions Below Limit



Preventative measures include:

Adjusting door bolts, frame clips and hour glass clips

Cleaning doors, door jambs, sill plates and spotting targets

Replacing door cleaner bushes and jamb cleaner blades on frequent schedule

Replacing damaged doors and frames.

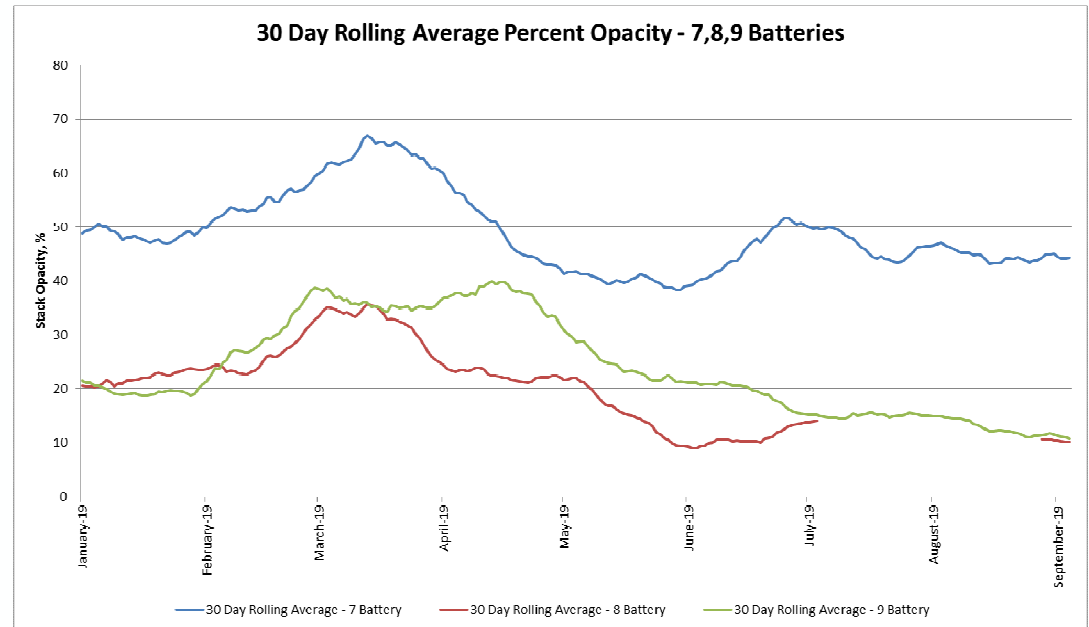
Applying silicate to seal leaks



Stack Opacity

Continuous corrective actions on all batteries

- Part of the investment plan to achieve compliance with SSS limits also focuses on reducing stack emissions from cokemaking
- Intensive Masonry maintenance continues to be required on oven walls and end flues
- Focus is on reducing intensity of stack emissions



- #8 battery opacity meter off line from July 3rd to July 25th after lightning strike

Public Complaints

There were no public complaints received since the last CLC meeting that related to a matter addressed in the SSS Order.

The following public complaints were received by the company:

- June 29 – Particulate from stacks/odour – 2
- July 2 – Particulate from stacks/odour
- July 3 – Particulate from stacks/odour
- July 16 – Odour
- July 27 – Odour
- Aug 1 – Odour
- Aug 9 – Odour
- Aug 29 – Odour

Site Specific Standards (SSS)

Benzene SSS – requires expansion of Benzene Emission Control (BEC) systems and on site monitoring to identify missing sources

- North Raw Liquor Tank – removed from service in late spring
- Planning for the installation of the remaining controls by 2020 year end is now underway.
- A monitoring program was completed in the by-products area to identify benzene emission sources. Three sources were identified and corrective actions are completed or planned.

Particulate SSS – An ambient air monitoring program is ongoing for metals contained in particulate (Iron, Chromium VI, Manganese and Nickel)

Technical Standard

Regulatory Instrument to replace existing SSS's

- A new Technical / Site Specific Standard for multiple air contaminants is under development
- Contaminants include: Particulate, B(a)P, Benzene, Sulfur Dioxide, Total Reduced Sulfur and Metals (x4)

Next steps – Algoma Steel participating in working groups focusing on:

- Fugitive metal/particulate emissions from on-site roadways; steel-making; slag management;
- Identifying current emission sources and air pollution control approaches at each facility;
- Assessing the ongoing ambient air monitoring program results;
- Coke oven gas de-sulphurization (Federally required by January 1, 2026);
- Development of an Ontario-based emission auditor training and certification program;
- Completing a jurisdictional review of best available emission control techniques globally;
- Industry economic overview and economic feasibility assessment (industry led);
- Development of trigger mechanisms to facilitate a review of the appropriateness of the Technical Standard every 7-8 years

Noise Abatement

- Installation of two fan motor enclosures at the steelmaking gas cleaning plant completed in June
- Cost ~\$1,200,000
- Successfully reduced noise levels from 102 dBA to 86 dBA at 1 meter from the source



Noise Abatement

- New acoustic silencing muffler was installed at steelmaking in June at a cost of \$684,000
- Successfully reduced noise levels from 133 dBA to 92 dBA at 5 meters from the source



New Environmental Compliance Approval Applications

- Algoma Steel is applying for an amendment to an existing ECA for its #2 Ladle Metallurgy Furnace to install a larger baghouse than the existing approval to improve capture efficiency at both Ladle Metallurgy treatment stations.

Legacy Environmental Action Plan (LEAP)

Environmental Framework Agreement

- The MECP and Algoma Steel signed an Environmental Framework Agreement which was established to mitigate risk from on-site legacy environmental liabilities

Program Approval

- Ontario's EPA allows a person responsible for a source of contaminant to submit a program to prevent or to reduce and control the discharge into the natural environment of any contaminant. A Program Approval has been issued by the MECP which describes the associated abatement activities.

LEAP

- The LEAP is a risk-based environmental management plan to be maintained and funded by Algoma Steel (ASI), with the objectives of identifying, assessing, managing and mitigating off-site adverse environmental effects caused by Legacy Environmental Contamination at the Site. ASI is responsible for planning, budgeting/funding, implementing, documenting and reporting the activities undertaken as part of the LEAP, while the MECP has oversight, review and approval responsibilities for LEAP budget, plans and activities, including approval (or pre-approval) of eligible LEAP expenses.
- A formal action and implementation plan for Year 1, and action plans for the following four calendar years have been approved by the MECP. Algoma Steel has commenced the implementation of the Year 1 Action Plan.

Legacy Environmental Action Plan (LEAP)

There are 9 projects scheduled for implementation in 2019 totaling \$4.1 million

- Site wide baseline investigation
- PCB disposal
- Dredge Boat Slip
- Secondary Containment Waste Oil Tanks
- Secondary Containment Raw Liquor Tanks
- Legacy Tire Disposal
- Legacy Coke Oven Gas main cleaning
- Engineering for re-routing blast furnace 30" sewer
- Engineering Base Line Ditch Water Treatment



Climate Change Regulations

Federal Backstop

- Federal regulations published in June 2019
- Output based pricing system applies in provinces without carbon pricing systems starting Jan 1 2019.

Ontario

- Ontario published regulations with GHG emissions performance standards, however only triggered if the Province's obligation to the federal backstop is terminated

Public Open Houses

- Last open house held on December 5, 2018 at the Polish Canadian Hall
- Next open house to be scheduled for fall 2019.

Next Meeting

- Proposed 2019 Schedule:
 - September 10th, 2019(today)
 - December 10th, 2019