



# Community Liaison Committee Meeting #35

December 2020

# Agenda

1. Review of Sept. 15<sup>th</sup>, 2020 meeting notes
2. Membership Items and Terms of Reference
3. Site Specific Standards / Technical Standards
4. Environmental Compliance Approval updates
5. Legacy Environmental Action Plan
6. Climate Change
7. Public Complaints
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  
Jillian Marquis  
Kathie Brosemer  
Kara Flannigan  
Steve Carey  
Dan Sayers Jr.  
Catherine Taddo  
Wayne Hubbard  
Lisa Derickx

### Alternate

Chris Galizia  
Ron Dorscht  
Peter McLarty  
Suzanne Lieurance  
Chris Spooney  
Maggie McAuley  
Dennis Gagne

# CLC Terms Of Reference

- The original CLC Terms of Reference were distributed to members in advance of the meeting for review and comment prior to updating with new company letterhead and signatories.

# Site Specific Standard for Particulate and BaP

- On March 27<sup>th</sup>, 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

# Cokemaking Emissions Performance – 100% compliance

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*

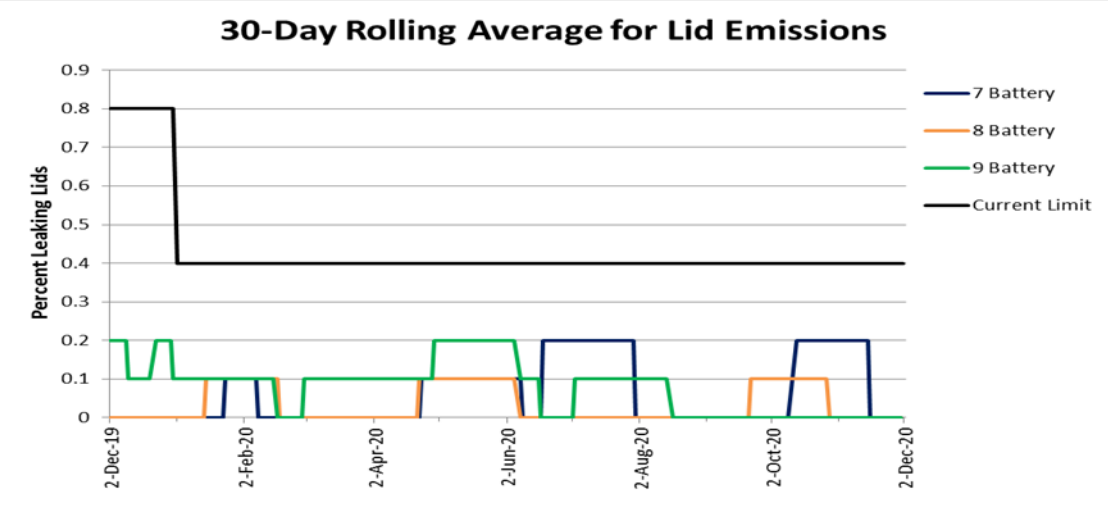
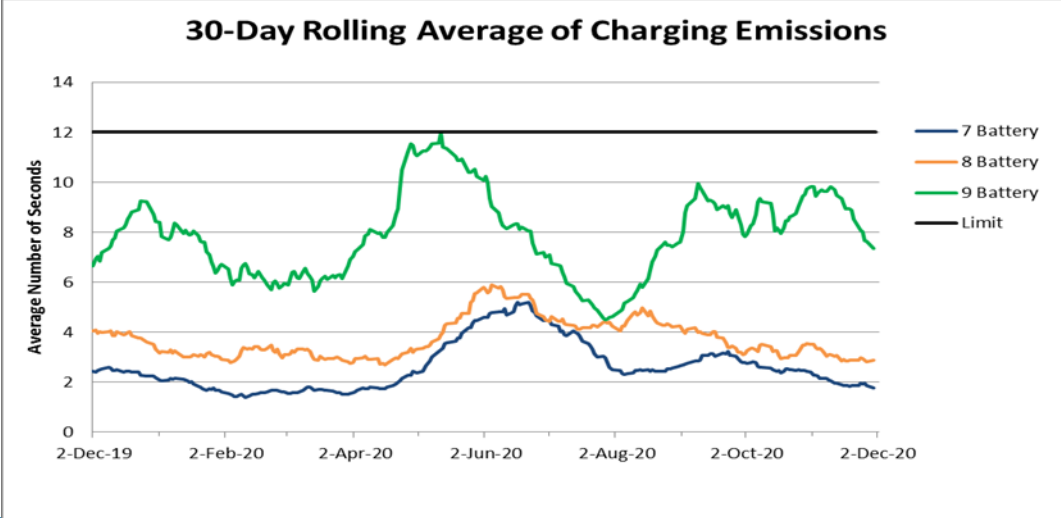
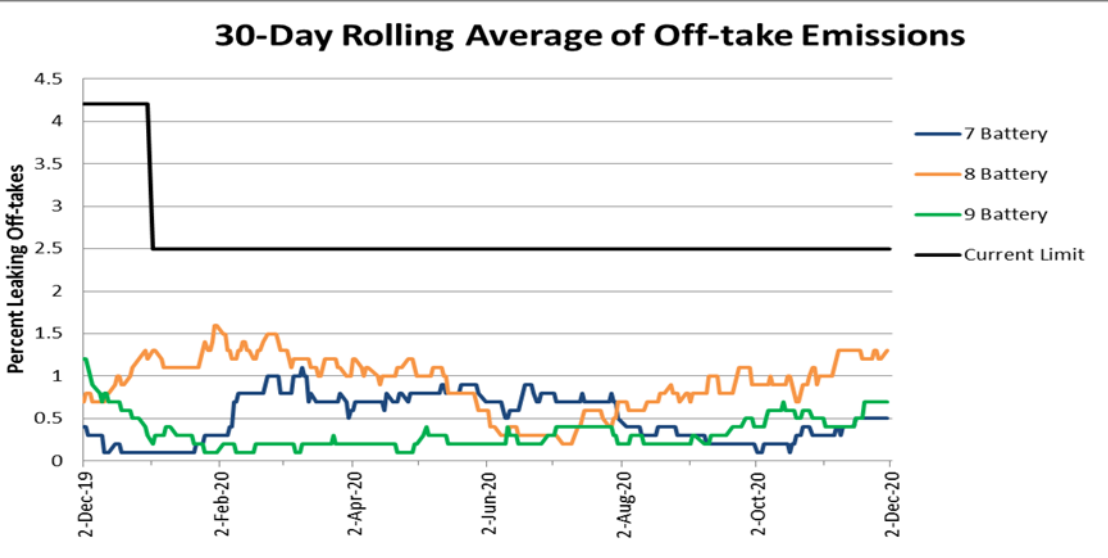
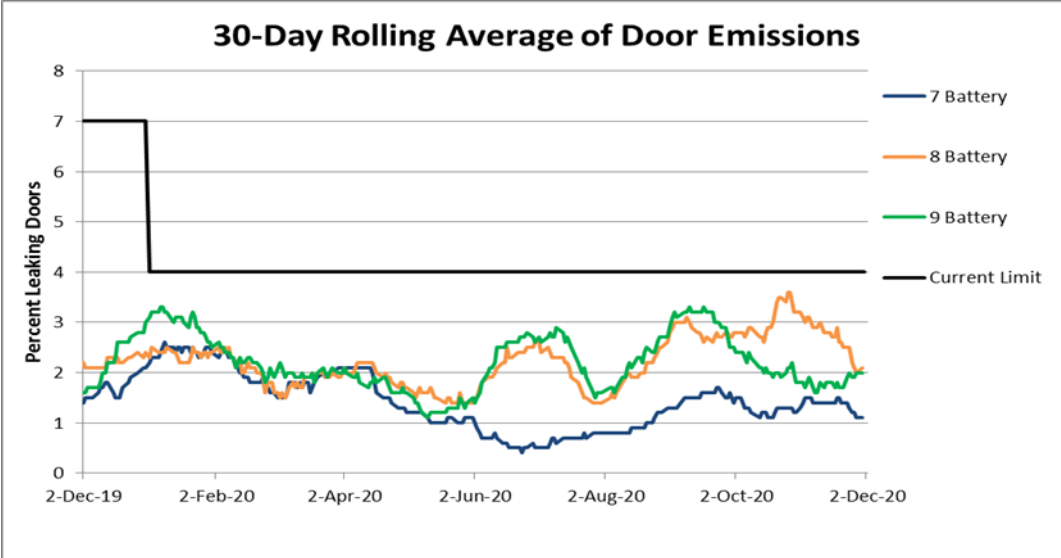
**New limits introduced July 2015. Progressive, annual reduction.**

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



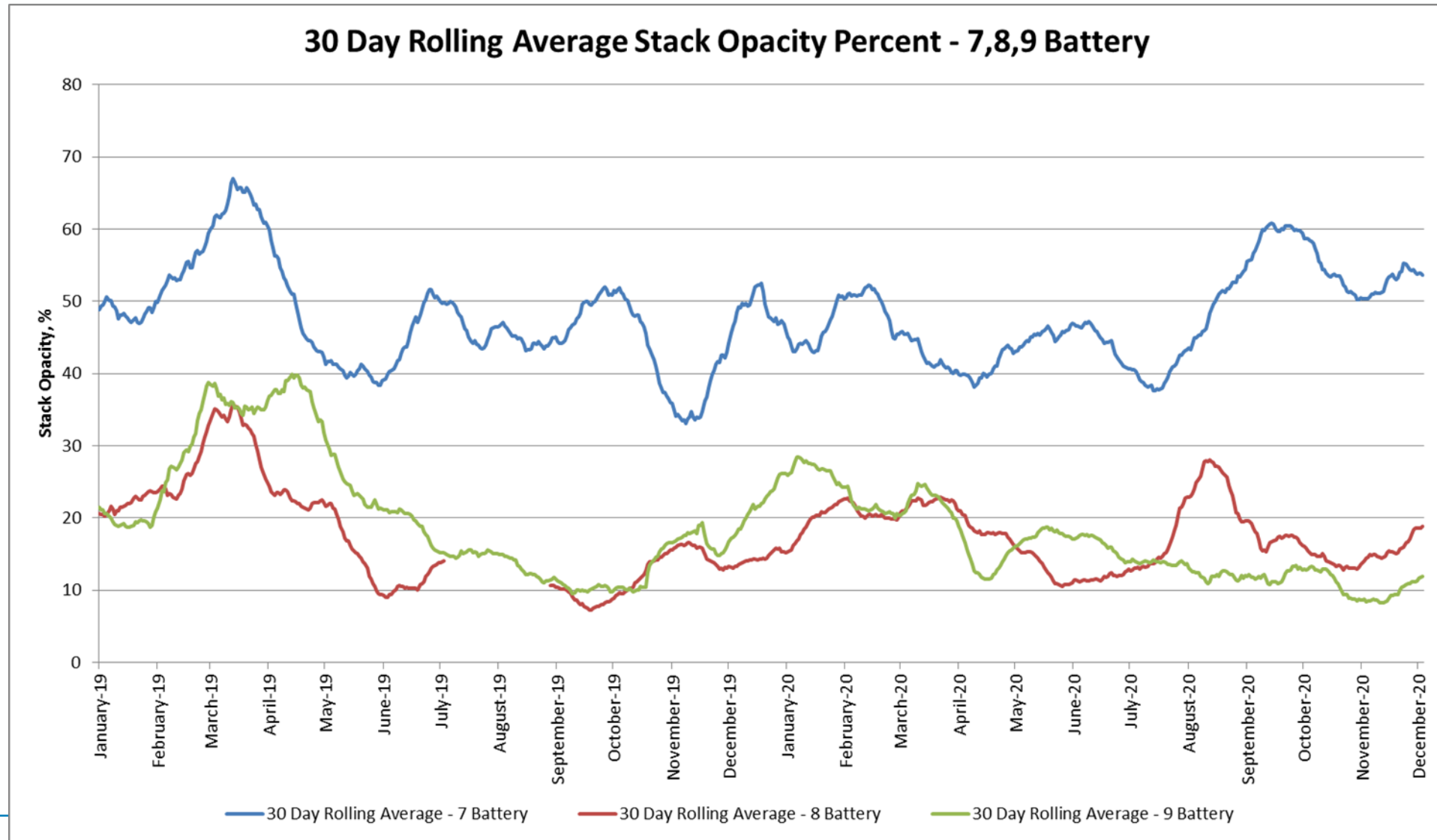
**Algoma Steel is meeting the 2020 limits on all three batteries.**

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



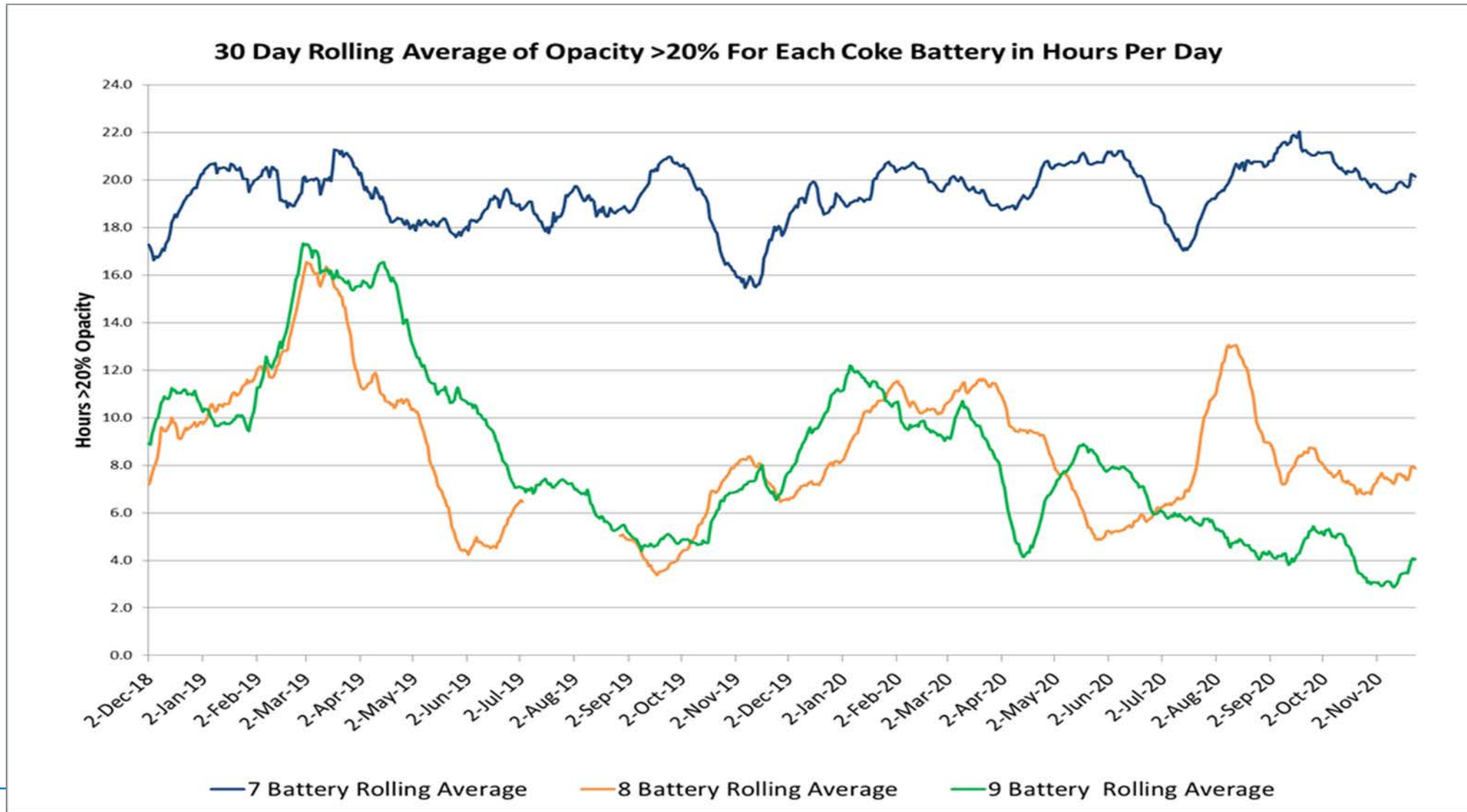
**All Pushing Opacity corrective actions have been successful. Operating below the limit for all parameters.**

# Cokemaking Stack Opacity Performance – Average Opacity





# Cokemaking Stack Opacity Performance – Average Opacity Duration >20%



# Cokemaking Stack Opacity- Improving Masonry

Numerous actions are underway to replace aging infrastructure and thoroughly inspect and repair oven masonry conditions.

- Through-wall replacements (**ONGOING - Three completed on #9 battery in November**)
- End flue rebuilds on #7 battery (**ONGOING - #61 oven completed in November**)
- **NEW** Comprehensive Preventative Oven Maintenance program on #7 battery including extensive oven wall assessment and ceramic welding on refractory, repairing charge holes, jambs, buck stays, inner & outer frame packs and floor flooding followed by oven pressure testing to ensure effectiveness. (**UNDERWAY**)
- Outer regenerator brick replacements (**ONGOING - 80% complete #7 Battery**)
- **NEW** Conducting trials with new oven dusting technology beginning on #8&9 batteries. This process involves injecting a misting product into a pressurized oven. The pressure forces the mist into micro-cracks in the refractory where it adheres and seals (**SCHEDULED – December**)

**These actions will minimize gas leakage from the ovens to flues and reduce stack opacity.**

# Cokemaking Stack Opacity- Improving Combustion

A thorough and methodical gas system inspection and correction program has commenced.

- **NEW** tar precipitators installed to remove residual tar mist from coke oven gas. This ensures clean gas is available for combustion and minimizes fouling and gas flow restrictions throughout the gas supply system **(COMPLETE)**.
- Replaced preheater and cleaned gas manifolds **(COMPLETE)**. Header cleaning underway to improve gas flow to the oven flues **(UNDERWAY)**.
- Pant leg sealing to reduce tramp air ingress **(COMPLETE)**. Mushroom sealing to better control combustion air intake which will improve combustion efficiency **(UNDERWAY)**.
- After optimizing clean gas flow and combustion air intake, quadrant combustion settings will be re-set for each individual oven **(UNDERWAY)**.

**These actions will ensure clean gas is supplied, unrestricted to the batteries, allowing optimal combustion control and improving overall battery heating and stack opacity.**

# Particulate and Benzene Site Specific Standards

## Particulate and Benzene Site Specific Standard Extensions

- The MECP has posted proposals to extend the expiry dates for 12 site-specific standards for six facilities in Hamilton, Nanticoke and Sault Ste. Marie related to the integrated iron and steel sector. Extending the expiry dates of the existing site-specific standards until June 30, 2023 will give enough time for an integrated iron and steel sector technical standard to be published and companies to be registered. The proposals have been posted to the Environmental Registry for a 45-day consultation period ending December 14, 2020.
- The proposal can be viewed at the following link: <https://ero.ontario.ca/notice/019-2301>

## Benzene Section 35 Order Extension

- An existing Order requires installation of a vapor collection and air pollution control device for certain air emissions sources by December 31<sup>st</sup>, 2020.
- A one year deferral request to December 31<sup>st</sup>, 2021 was submitted by Algoma Steel to the MECP due to the extenuating circumstances surrounding the COVID-19 pandemic.
- The proposal to amend the Order to extend the completion date of benzene emission controls until December 31, 2021, has been posted on the Environmental Registry for a 45-day consultation period ending December 20, 2020 and can be viewed at the following link: <https://ero.ontario.ca/notice/019-2526>

# Technical Standard

## Regulatory Instrument to replace existing SSS's

- A new Technical Standard for multiple air contaminants is under development
- Contaminants include: Suspended Particulate Matter, B(a)P, Benzene, Sulfur Dioxide, Total Reduced Sulfur and Manganese

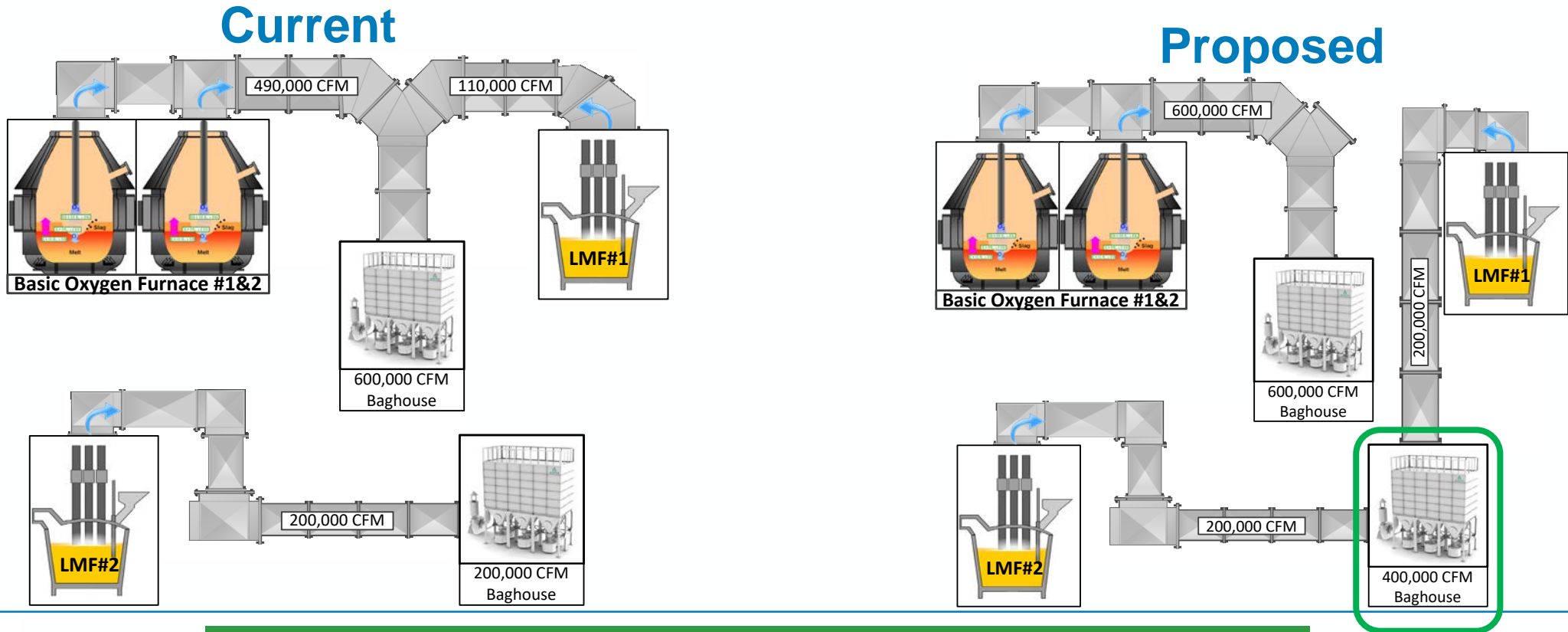
## Algoma Steel participating in MECP led working groups focusing on:

- Fugitive metal/particulate emissions from on-site roadways; steel-making; slag management;
- Identifying current emission sources and air pollution controls to ensure no back-sliding;
- Expanding Leak Detection And Repair (LDAR) programs in by-product plants for benzene;
- Coke oven gas de-sulphurization (Federally required by January 1, 2026);
- Development of an Ontario-based cokemaking 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

# Larger Baghouse Proposed

## Application for amendment to existing Compliance Approval

Algoma Steel has applied for approval to install a larger baghouse on its No. 2 Ladle Metallurgy Furnace to improve capture efficiency at both ladle metallurgy treatment stations and at the basic oxygen furnaces.



Draft approval has been received.

# LEAP - Addressing Legacy Environmental Issues

## Legacy Environmental Action Plan (LEAP)

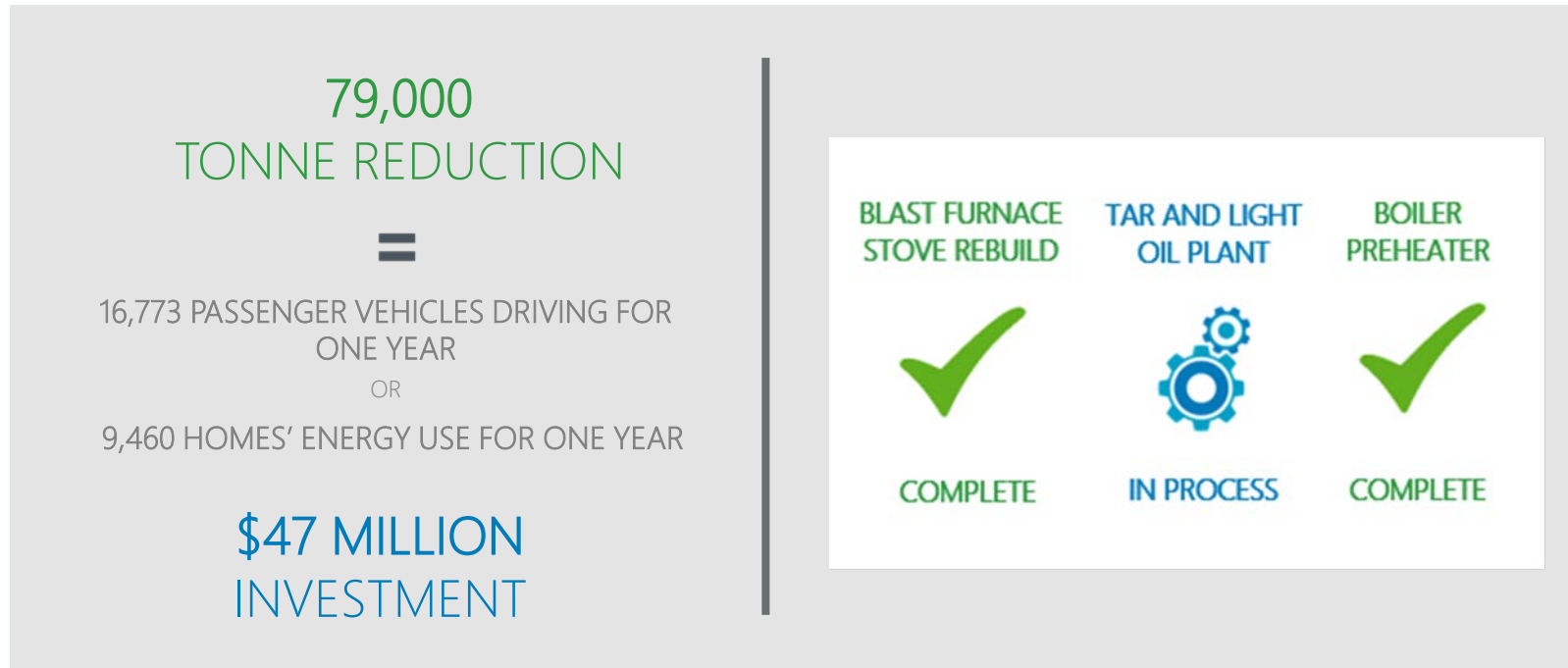
- The LEAP is a risk-based environmental management plan with the objectives of identifying, assessing, managing and mitigating off-site adverse environmental effects caused by Legacy Environmental Contamination at the Site.
- Targeted annual investment - \$3.8 million; totaling \$79.8 million over 21 years

## \$2 million in projects have been completed for 2020 including the following :

- Expanding the site wide baseline hydrogeological investigation **(Complete)**
- Legacy Tire Disposal **(Complete)**
- Engineering for re-routing blast furnace 30" sewer **(Complete)**
- #7 Tank Clean-out **(Complete)**
- Refurbish #7 Tank for future Groundwater Collection System **(~50% complete)**
- Carbon capture and storage testing **(Underway)**
- Extrusion briquetting testing **(Underway)**
- Boat Slip Sediment Study to develop a rehabilitation target for sediment quality criteria **(Underway)**

# Climate Change Action

On August 18<sup>th</sup> the Government of Canada announced funding support through the Low Carbon Economy Fund for up to \$4M to help refurbish Algoma Steel's tar and light oil plant. This project is expected to result in a 21,000 tonne reduction in our annual greenhouse gas emissions. This is part of \$47 million of investments for three projects that will deliver a targeted 79,000 tonne reduction.



New electrostatic tar precipitators and light oil scrubbers will remove tar and light oil from the coke oven gas so they will not be combusted. Instead of releasing GHG emissions, these by-products will be recovered and sold for use in the chemical industry.





# 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 since the last CLC:

- 2 Odour – Unknown source
- 1 Particulate – Stack
- 3 Noise – 2 from warning alarm at blast furnace, one from boiler malfunction at Conmee Avenue Facility – New boiler scheduled for installation

An internal investigation into each public complaint is conducted and a report is submitted to the MECP and a summary is listed on the company website.

# Public Open Houses

- Last open house was held on December 10, 2019 at the Northern Community Centre, Korah Branch Library Community Room.
- After due consideration and consultation with Algoma Public Health, Algoma has requested a deferral of the 2020 open house due to the COVID-19 pandemic. The public health risk of an interactive, in-person event was deemed to be too high at this time.

# Next Meetings

- Proposed 2021 Schedule:
  - March 9<sup>th</sup>, 2021
  - June 8<sup>th</sup>, 2021
  - Sept 14<sup>th</sup>, 2021
  - Dec 14<sup>th</sup>, 2021