

Community Liaison Committee Meeting #48

3

Tuesday, March 5, 2024





Building better lives and a greener future.

Safety · Teamwork · Integrity · Caring

With every decision, every action, every day, we will work **safely** with **teamwork**, **integrity** and deep **care** for our people, their families and the environment



Agenda

- 1. Review of Dec 5th, 2023 meeting notes
- 2. Membership Items
- 3. Review Coke Making Incident
- 4. Cokemaking Emissions Performance
- 5. Electric Arc Steelmaking and Environmental Permit Applications
- 6. Legacy Environmental Action Plan
- 7. Next Meetings



Membership

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 Nation
Garden River First Nation
City of Sault Ste. Marie
United Steel Workers Local 2251
St. Mary's River RAP Coordinator

Primary Member Fred Post Lori Jalak David Trowbridge Jillian Marquis TBD Melissa Francella Steve Carey Dan Sayers Jr. Andrew Mallette **Catherine Taddo** Wayne Hubbard Lisa Derickx

Alternate

Chris Galizia Rick Lalonde Anton Schoahs Dan Gabor

Virginia Huber Suzanne Lieurance

Richard Perrault Maggie McAuley Dennis Gagne John Rankin



Coke Making Incident

- A structure supporting utilities piping at our Coke Making plant collapsed on January 20, 2024.
- The incident resulted abnormal coke oven gas flaring and air emissions.
- A quantity of effluent left our site initially, and potential sources of discharge were contained later that day.
- A battery repair plan was prepared in accordance with the Coke Making Environmental Compliance Approval to ensure the safety of personnel, maintain the assets and systematically restore operations.
- This plan requires some facilities to operate at reduced capacity (10-15%), which necessitates venting pressure to atmosphere when charging of ovens for safety reasons.
- Included in the plan is a request for a temporary exemption from the battery fugitive emission limits until the battery repair plan is complete. This request has been approved by the MECP on March 4th, 2024.



Battery Repair Plan Details

- During this period we have enhanced monitoring of our process and air quality including:
 - Additional ambient air monitoring in the community
 - A temporary alteration to the fugitive visible emissions monitoring
 - Regular reporting of operating practices, visible emissions and air quality monitoring results
- Alternative procedures implemented to minimize emissions during the battery repair.
- Creation of increased windows for inspection and maintenance to minimize emissions during the battery repair and to prepare for when the batteries return to normal operation.



Blast Furnace Update

- At the time of the coke-making incident, for safety reasons Blast Furnace operations were temporarily suspended while the site was secured.
- This resulted in temporary layoffs.
- We have finished all of the necessary repairs at the blast furnace following the related operational outage and have restarted the furnace.
- We will continue to assess supplementing coke supplies with market purchases to balance the requirement for iron production.



Cokemaking Emissions Performance

Key Performance Indicators related to Cokemaking Emissions:

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

Performance is monitored and calculated daily for each battery

Progressive Annual Reduction

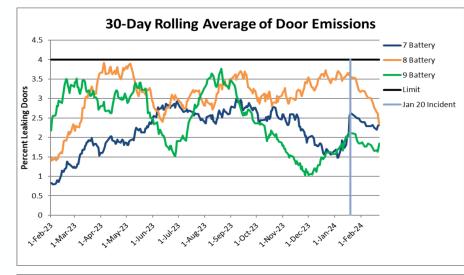
30 Day Rolling Average %

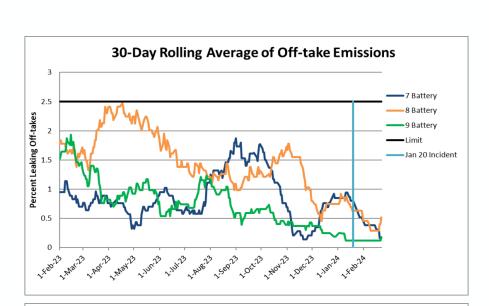
Implementation Date	Doors	Lids	Off-takes	Charging Emissions	Pushing Opacity (%)
July 2, 2015	38	0.8	25	12 sec	50
Jan. 1, 2016	22.5	0.8	15	12 sec	50
Jan. 1, 2017	7	0.8	4.2	12 sec	50
Jan. 1, 2019	7	0.8	4.2	12 sec	40
Jan. 1, 2020 onward	4	0.4	2.5	12 sec	30

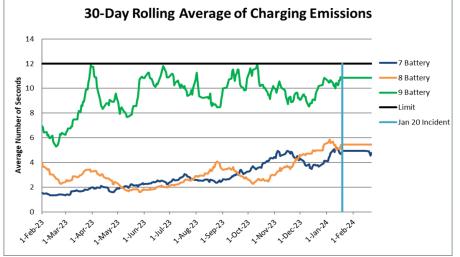
Algoma Steel is meeting the current leak limits on all three batteries.

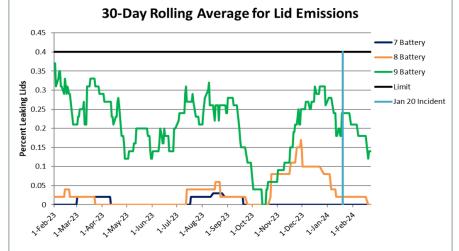


Cokemaking Emissions Performance





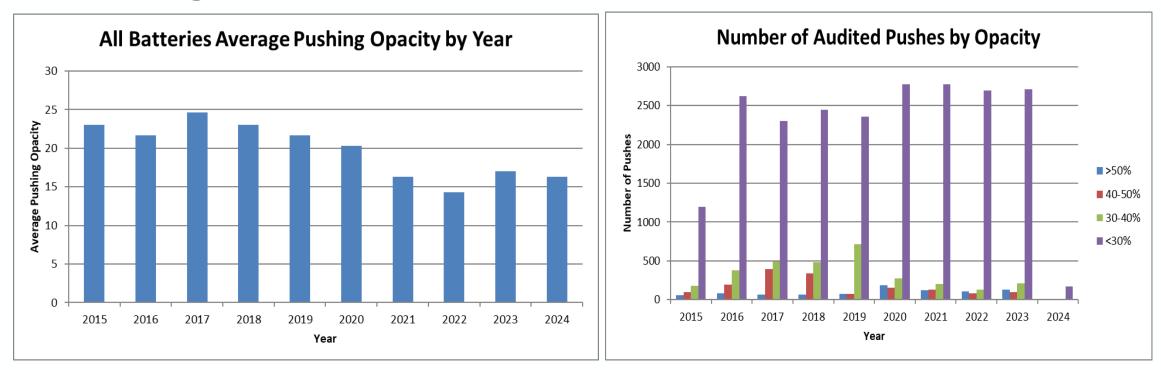




The blue line represents the date of the structure collapse



Cokemaking Emissions Performance



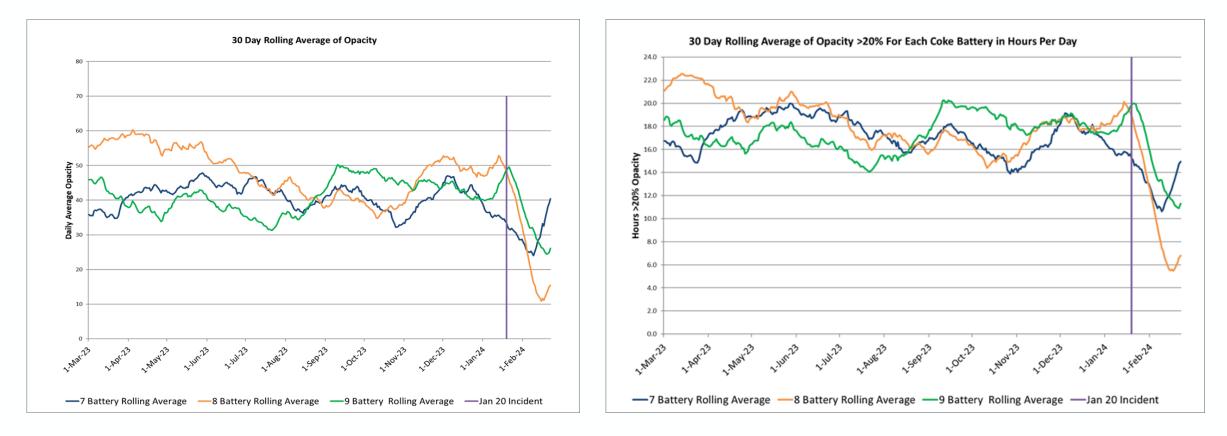
Notes:

- 2015 data begins on July 2nd when the standard came into force
- 2024 data includes Jan 1, 2024 to Feb 22, 2024
- · Number of audits per year vary based on changing operating conditions

All corrective actions taken to improve pushing opacity have been successful



Cokemaking Stack Opacity



The blue line represents the date of the structure collapse



Our Sustainability Journey





Algoma Steel issued its first annual environmental, social and governance (ESG) report

We believe becoming a North American leader in green steel, **means becoming a leader in ESG.**

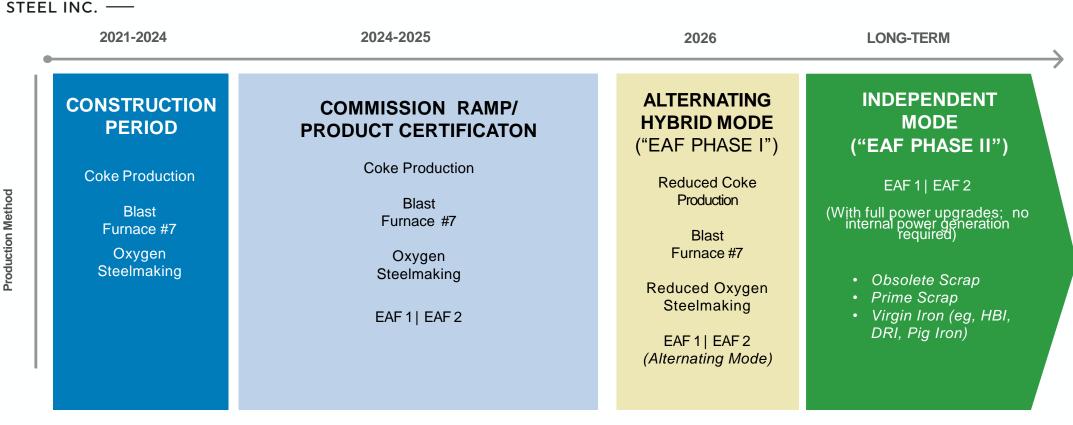
In our first ESG report, we're proud to share our progress and the steps we're taking to align our operations with the principles of environmental stewardship, social responsibility, and sound governance to ensure the benefits of steel can endure for generations to come.

You can access our full ESG Report on www.algoma.com









A phased approach reduces implementation risk:



ALGOMA

Phase I

Operations would alternate **arcing** on one furnace at a time with the potential of using hot metal charge from No. 7 Blast Furnace (which is operating at reduced output). Powered by the on-site power generation and grid power.

Phase II

Operate both electric arc furnaces simultaneously with 100% cold charge, including obsolete and prime scrap with option for addition of virgin iron units, such as HBI, DRI or pig iron as required. Fully powered by the Ontario grid.



Electric Arc Furnace Environmental Controls

Fume Treatment Plants

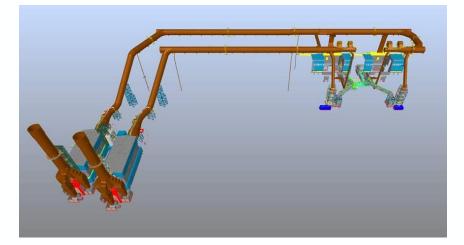
The fume treatment plants capture air and dust emissions from the process.

Water Treatment Plant

The water treatment plant conserves water usage by recycling non-contact water from the process.

Engineered Furnace Enclosures

These enclosures feature large doors which seal shut before the arcing process begins, containing any sound, sparks or dust particles.





Fume Treatment Plants

Furnace Enclosure



Electric Arc Furnace (EAF)

Construction Progress

- **Completed** Floor Slab for Utility Room 1
- Dust Hoods 50% Installed
- Fume Treatment Plant Foundations **95% Complete**
- 90% Complete Shell Reline Foundations
- Meltshop Building Roofing 40% Complete
- Both Charging Cranes Major Components Installed
- No.2 Baghouse Equipment Installation **30% Complete**
- Water Treatment Plant Excavation Complete and Foundation 8% Complete



Photo from February 22, 2024



Electric Arc Furnace (EAF)

Equipment Logistics

- More than 4200 packages containing 15,000 tons Danieli equipment received
- Less than 1,000 packages left to arrive
- 6 chartered vessels have been unloaded
- Containers trucks continue to arrive (200+ received so far)
- Over 500 packages delivered to construction site



Photos from December 2023





Algoma's Shrinking Environmental Footprint

Transition to Electric Arc Steelmaking

Algoma Steel has committed to transition its manufacturing process from the integrated basic oxygen steelmaking route to
electric arc steelmaking. This process change will shrink Algoma's environmental footprint dramatically, reducing
greenhouse gas emissions by up to 70%⁽¹⁾ and positioning Algoma as one of the leading producers of green steel in
North America.

Other benefits include:



		Preliminary Estimated Reduction ^{(1).}	% Reduction
GHG Emissions	C0 ₂ C0 ₂ /NT production	3.0 MM tonnes 1.33 tonnes	70% 75%
SOx Emissions		4,060 tonnes	82%
NOx Emissions		1,604 tonnes	52%
Cokemaking Emissior	15	Complete elimination of Cokemaking Stack and Fugitive Emissions	100%

Note (1): Source: Company information. Expected environmental benefits from the EAF are based on projected estimates for Algoma, using published data sources for similar technologies. Estimated benefits based on current production versus forecasted production of 3.0MM tons of steel shipments produced under full, exclusive EAF configuration.

Information updated November 23, 2022

The information contained herein may contain "forward-looking information" under applicable Canadian securities legislation and "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 (collectively, "forward forward-looking statements regarding Algoma's strategic objectives, position as a leading producer of green steel. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions. Many factors could cause actual future events to differ materially from the forward-looking statements in this document. Readers are cautioned not to put undue reliance on forward-looking statements, and Algoma assumes no obligation and does not intend to update or revise these forward-looking statements, which is set forth in the section entitled "fisk Factors" and "Cautionary Note Regarding Forward-Looking statements" in Algoma's Annual Report on Form 20-F field by Algoma with the SEC (available at www.sec.gov) and the Ontario Securities Commission ("OSC") (available under Algoma's SEDAR profile at www.sec.gov) and the Ostar they are made.



Transition to Electric Arc Furnace Steelmaking

Applications for Environmental Compliance Approvals

Algoma Steel has submitted applications for the following approvals:



Site wide **Environmental Compliance Approval** for air and noise based on the planned progressive shutdown of equipment and facilities associated with the transition to electric arc furnace steelmaking. Application to include:

- Two new EAF exhaust treatment plants including baghouses
- A new cooling tower



Amendment to the existing industrial sewage works Environmental Compliance Approval that incorporates:

- New recirculating non-contact cooling water system (with a small blowdown to the existing water treatment facility)
- No new contaminant loading to the existing treatment facility

Over the course of the transition, contaminant loading to the water facility will decrease. Up to four existing effluent discharges and up to seven existing noise sources will be eliminated.



Site Specific Standard Requests

New Site-Specific Standards will govern the operating transition to electric arc steelmaking

- In March 2022, Algoma submitted a request for amended site-specific standards for benzene, benzo(a)pyrene, and particulate matter. The new standards will reflect changes to the air emission dispersion model that have resulted in an increase in modeled emissions.
- Algoma's request included a continuous improvement plan that provides for the substantial reduction or elimination of emissions as a result of the progressive shutdown of equipment and facilities in the transition to electric arc steelmaking.
- Algoma also submitted a new Site Specific Standard application for sulfur dioxide (SO2) in order to provide a compliance approach to the new provincial standards that came into force in July 2023. This application includes an action plan to reduce SO2 which reflects the progressive facility shutdown.
- The applications are currently under review by the Ministry of Environment, Conservation and Parks
- Details of the site specific standard requests can be found on Algoma's website: <u>https://algoma.com/environment/site-</u> <u>specific-standards-applications/</u>



Algoma Steel is committed to being a good neighbor

Since we saw you last in December we have...

- Gifted a Ford Bronco to Local Hero's Diana and Tim, through SooToday's 12 days of Christmas Random Acts of Kindness
- Sponsored this years Holiday Skates and Bon Soo Winter Carnival
- Brought #CareersinSteel Exhibits to Superior Heights
- Sponsored and participated in the 19th annual Bring a Doctor Home Hockey Tournament





Follow Algoma's Journey to Green Steel!



Follow #AlgomaEAF on Linkedin or www.algoma.com/sustainability for project updates!