

Community Liaison Committee

Meeting #47

Tuesday, Dec 5, 2023





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 Sept 12th, 2023 meeting notes
- 2. Membership Items
- 3. Cokemaking Emissions Performance
- 4. Public Complaints
- 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 Kathie Brosemer Melissa Francella Steve Carey Dan Sayers Jr. Stephanie Seymour Catherine Taddo Wayne Hubbard Lisa Derickx

Alternate

Chris Galizia Rick Lalonde Anton Schoahs Dan Gabor

Chris Spooney Suzanne Lieurance

Maggie McAuley Dennis Gagne John Rankin



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











Site Greening Update





Cokemaking Emissions Performance

100% Compliant with the Site Specific Standard leak limits

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









All batteries performing below leak limits



Cokemaking Emissions Performance



Notes:

- 2015 data begins on July 2nd when the standard came into force
- 2023 data includes Jan 1, 2023 to Nov 30, 2023
- · 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





Public Complaints

Public complaints received by Algoma since the last CLC include:

- Noise
- Odour
- Particulate







2021-2024 2024-2025 LONG-TERM 2026 ALTERNATIG **INDEPENDENT** CONSTRUCTION **COMMISSION RAMP/** MODE **HYBRID MODE** PERIOD **PRODUCT CERTIFICATON** ("EAF PHASE I") ("EAF PHASE II") Coke Production **Coke Production Reduced Coke** EAF1|EAF2 Production Blast Blast (With full power upgrades; no internal power generation required) Furnace #7 Furnace #7 Blast Oxygen Furnace #7 Oxygen Steelmaking Steelmaking Obsolete Scrap **Reduced Oxygen** Prime Scrap Steelmaking Virgin Iron (eg, HBI, EAF1|EAF2 DRI, Piq Iron) EAF 1 | EAF 2 (Alternating Mode)

A phased approach reduces implementation risk:



ALGOMA — STEEL INC. —

Production Method

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.

2



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





22

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 /NTproduction	3.0 MM tonnes 1.33 tonnes	70% 75%	
SOx Emissions		4,060 tonnes	82%	
NOx Emissions		1,604 tonnes	52%	
Cokemaking Emissions		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 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 within the respectations and experiments, in Algoma is stategic assumptions. The list of factors is not exhaustive and readers should also consider the other risks and uncertainties set forth in the section entitled "Risk Factors" and "Cautionary Note Regarding 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 in Algoma's other public filings with the SEC and the OSC. Forward-looking statements speak only as of the date they are made.



Electric Arc Furnace (EAF)

Construction Progress

- 11,000 NT of steel erected
- Utility room No.2 building: **99% complete**
- Scrapyard building: **75% steel erected**
- Fume Treatment Plant stacks foundations: 83% complete
- FTP 2 structural steel 10% erected





Electric Arc Furnace (EAF)

Equipment Logistics

- More than 3300 packages containing 10,900 tons Danieli equipment received
- 500,000 sqft of storage area utilized out of total 1M sqft available
- 5 chartered vessels have been unloaded
- Containers trucks continue to arrive (140+ received so far)
- First Charging crane bridges delivered and erected
- 230+ parts already ordered for construction from storage





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>



Site Greening

Algoma's site greening project consists of a four year plan to install **4.1 km of shoreline protection** along the St. Mary's River to prevent future erosion.

The project has commenced with slope preparation and the placement of the clean riprap and armour stone.

Once the stone is installed, clean soils will be introduced, creating seasonal surface water ponding areas, and vegetating with select native plants and tree species. This will be done in **collaboration with Sault College.**

The site greening initiative involves the creation of **naturalized green buffer strips** along the perimeter of the site which will be protected from possible erosion.





Decarbonization Beyond the EAF

Algoma's commitment to a greener future

- \$25M investment in two GE turbines for Algoma's Power Plant this will increase our power capacity from 36MW to 115MW.
- Employee take home recycling program (Over 150,000 lbs diverted from landfill)
- Utilizing local biomass for fuel substitution
- Process electrification
- Carbon capture, utilization and storage
- Hydrogen based fuel substitution





Algoma Steel is committed to being a good neighbor

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

- Brought #CareersinSteel Exhibits to St. Mary's College
- Delivered our third annual donation of \$10,000 to St. Vincent's Place Lunches for Learning Program
- Participated in this years Illuminate the Season for ARCH fundraiser
- Algoma Steel Employees donated 350+ gifts to Christmas Cheer





Follow Algoma's Journey to Green Steel!



Thank youNext Meeting Date: March 12th, 2024



PL-93

1-2.1

YOUR PARTNER IN STEEL. SINCE 1901