ALGOMA STEEL INC.

Community Liaison Committee

Meeting #45

Tuesday, June 6, 2023

Agenda

1. Review of March 7th, 2023 meeting notes
2. Membership Items
3. Cokemaking Emissions Performance
4. Public Complaints
5. New Air Quality Monitoring Stations
6. Electric Arc Steelmaking and Environmental Permit Applications
7. Legacy Environmental Action Plan
8. Next Meetings

Membership

Current Members and Alternates

Representation	Primary Member	Alternate
Algoma Steel	Fred Post	Chris Galizia
Ministry of Environment, Conservation & Parks	Lori Jalak	Rick Lalonde
Public	David Trowbridge	Anton Schoahs
Public	Jillian Marquis	Dan Gabor
SSM Tribe of Chippewa Indians	Kathie Brosemer	
Algoma Public Health	Melissa Francella	Chris Spooney
Chippewa County Health Dept.	Steve Carey	Suzanne Lieurance
Batchewana First Nation	Dan Sayers Jr.	
Garden River First Nation	Stephanie Seymour	
City of Sault Ste. Marie	Catherine Taddo	Maggie McAuley
United Steel Workers Local 2251	Wayne Hubbard	Dennis Gagne
St. Mary's River RAP Coordinator	Lisa Derickx	John Rankin

ALGOMA STEEL INC.

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

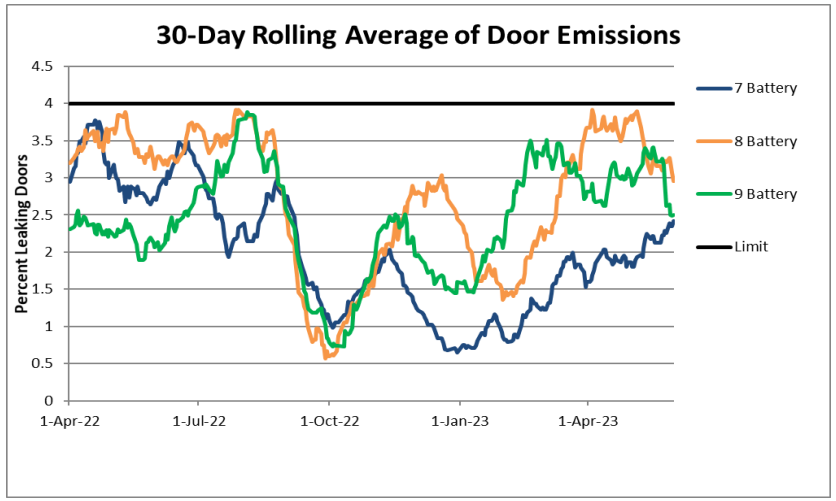
Progressive Annual Reduction

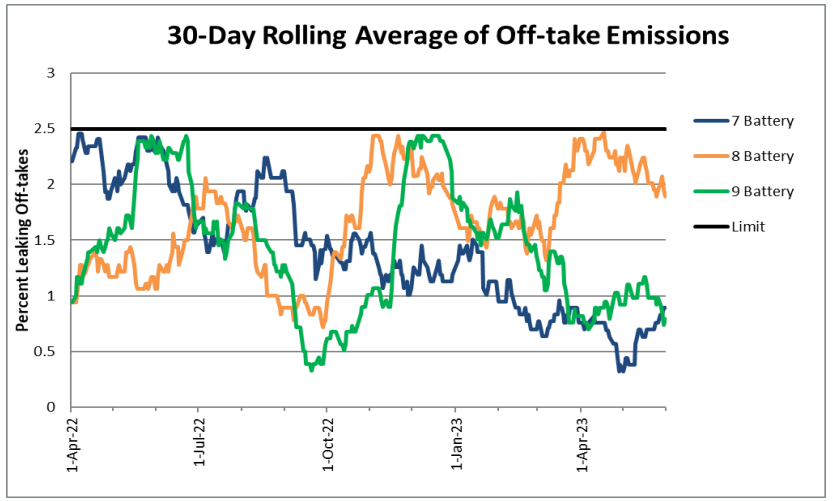
30 Day Rolling Average %

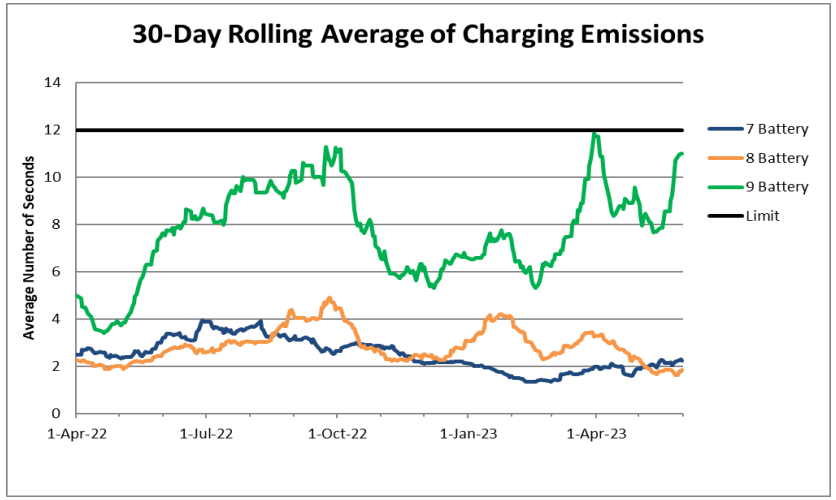
Implementation Date	Doors	Lids	Off-takes	Charging Emissions	Pushing Opacity (%)
July 2, 2015	38	0.8	25	12 sec	50
January 1, 2016	22.5	0.8	15	12 sec	50
January 1, 2017	7	0.8	4.2	12 sec	50
January 1, 2019	7	0.8	4.2	12 sec	40
January 1, 2020 onward	**4**	**0.4**	**2.5**	**12 sec**	**30**

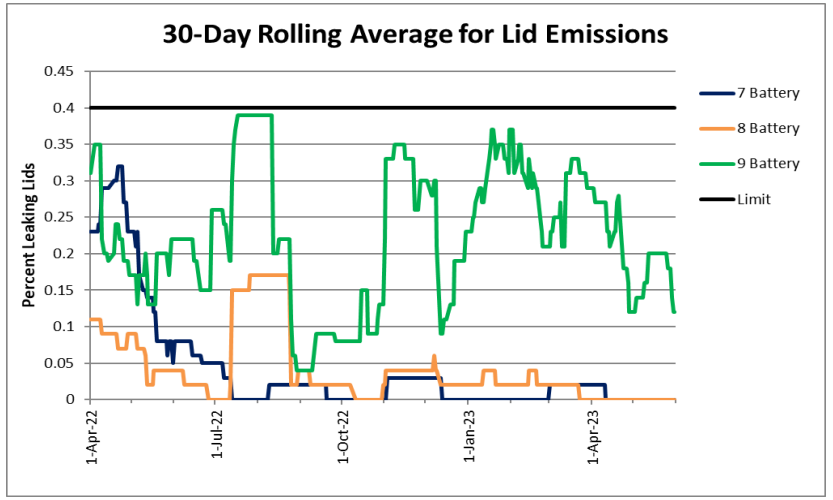
Algoma Steel is meeting the current leak limits on all three batteries.

Cokemaking Emissions Performance



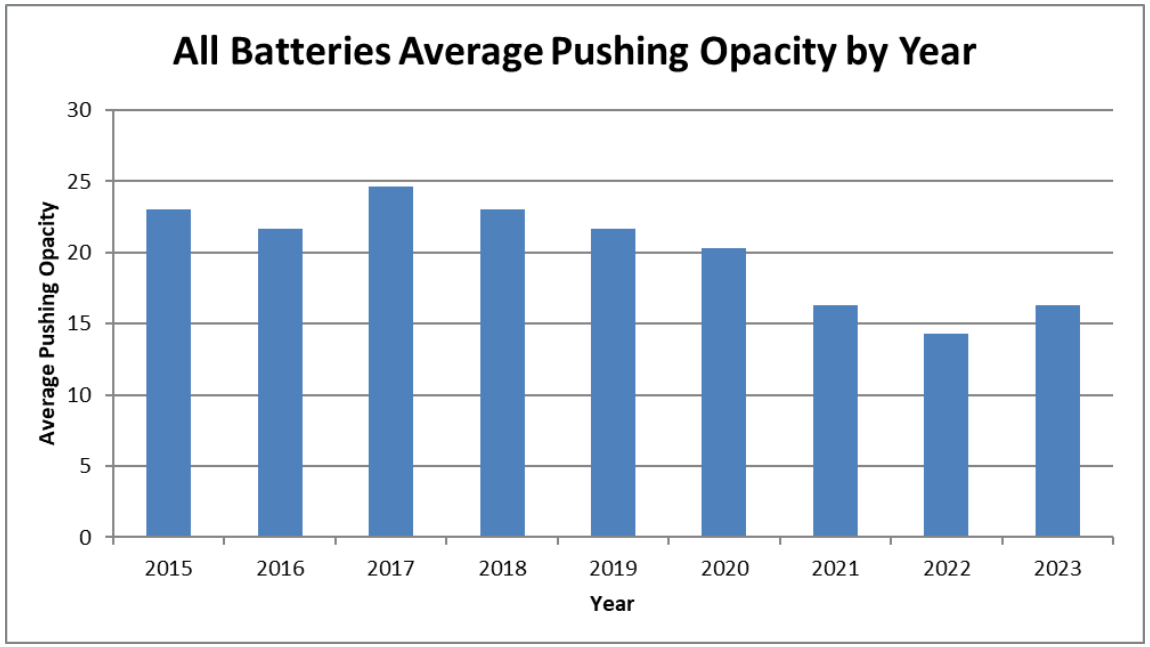


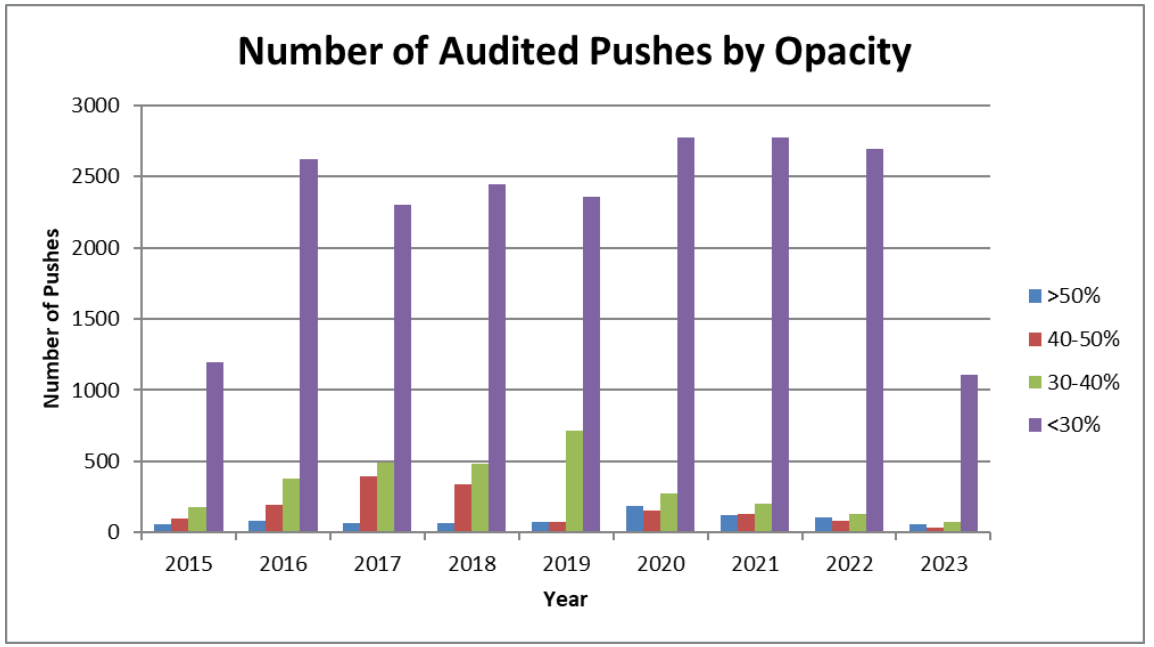




All batteries performing below leak limits

Cokemaking Emissions Performance



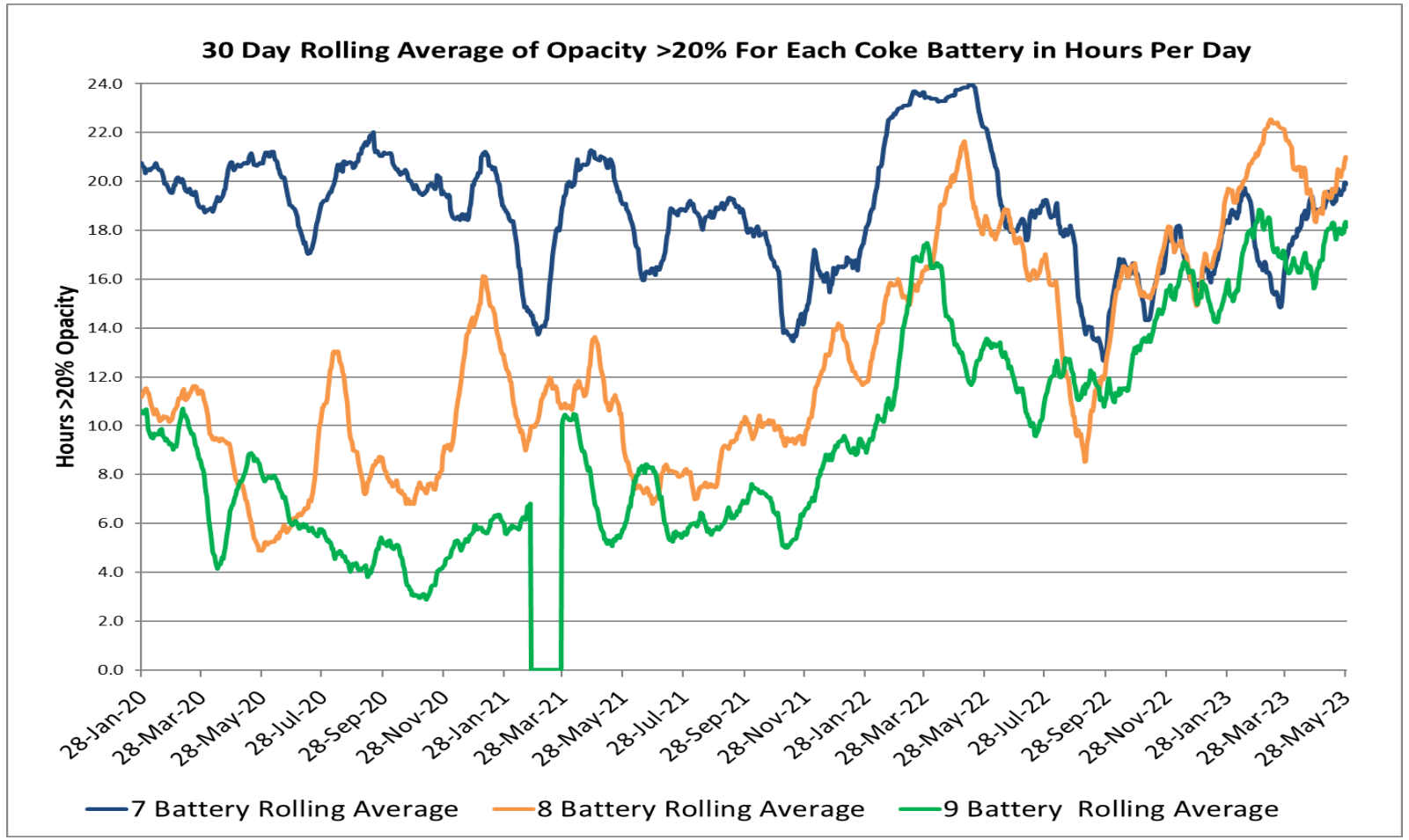


Notes:

- 2015 data begins on July 2nd when the standard came into force
- 2022 data includes Jan 1, 2022 to May 31, 2023
- Number of audits per year vary based on changing operating conditions

Actions taken to successfully correct pushing opacity

Cokemaking Stack Opacity



The implementation of Algoma's stack opacity reduction action plan is underway.

Public Complaints

Public complaints received by Algoma since the last CLC include:

- Noise
- Odour
- Particulate

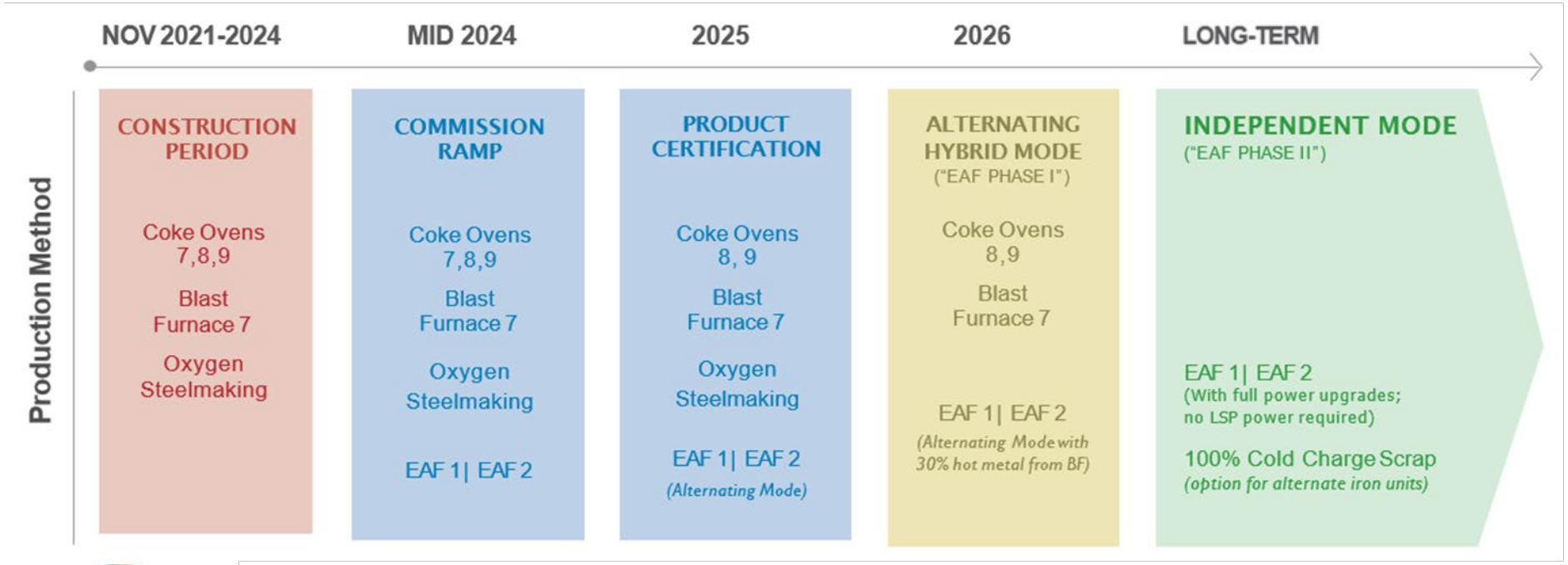
A detailed noise monitoring assessment was conducted and a source has been identified. A mitigation plan is under development.

Community Air Monitoring

Algoma's Ambient Air Quality Monitoring Program was expanded in 2022

- Recently expanded AAQMP to include three new permanent community air monitoring stations installed with all new equipment and a new meteorological station which were operational in Dec. 2022
- Stations are located at Bonney St., 4th Avenue and Cathcart St.
- Stations monitor for:
- TRS, SO2, PM10, PM2.5, TSP, Metals, VOC's, PAH's
- Communications of real time monitoring data are published on Algoma's public website.

Proposed operational transition to Electric Arc Steelmaking



Phase I

Operations would alternate arcing on one furnace at a time with approximate 30% hot metal charge from No. 7 Blast Furnace (which is operating at reduced output). Powered by the on-site LSP power generation and excess grid power from the local 230kV transmission upgrade.

Phase II

Operate both electric arc furnaces simultaneously with 100% cold charge, including obsolete and prime scrap with option for addition of alternate iron units, such as HBI or pig iron as required. Fully powered by the Ontario grid. On-site power generation not required.

Note: 2025 onwards, No. 7 Blast Furnace will operate at a lower rate.

Information updated November 23, 2022

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:

Quieter
Fewer noise sources.

Less Waste
Fewer by-product streams.

Cleaner Water
Fewer effluent discharges.

Cleaner Air
Lower emissions from fewer sources.

		Preliminary Estimated Reduction[1]	% Reduction
GHG Emissions	CO_2 CO_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 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

EAF Construction Update

Project statistics

- Concrete poured: 10,500 m^3
- EAF Building Foundations: 93% complete
- EAF Equipment Piling: 30% complete
- Fume Treatment Plant excavation: 90% complete
- Reinforcing Bar Used: 1,227 NT
- Excavated Material: 53,000 m^3
- Primary Steel for EAF Building: 13,800 MT
- **Building erection has commenced**

(1) Photo taken May 2023
(2) Project Estimates at Feb 1, 2023

Electric Arc Furnace Construction Update

By the Numbers

Community spend as of December 31, 2022 **$47.7M**

Local suppliers engaged: 47

Project spend as of December 31, 2022 **$220M**

Project budget: ~$703m

(1) Photo taken featured on the February 2023 issue of the Association for Iron and Steel Technology Plant Services publication
(2) Project Estimates at Feb 1, 2023

Transition to Electric Arc Furnace Steelmaking

Applications for Environmental Compliance Approvals

Algoma Steel has submitted applications for the following approvals:

1

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

2

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 treatment facility will decrease.
Up to five existing effluent discharges and up to 7 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.

- Model updates include:
  - Newest model version (province-wide)
  - Data reflecting more recent meteorological conditions
  - Changes to the land use designation from urban to rural to more accurately reflect local land use

- 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 coming into force in July 2023. This application includes an action plan to reduce SO2 which reflects the progressive facility shutdown.

Public Consultation – Site Specific Standards

A number of plain language summaries of Algoma's Site Specific Standard applications have been made available on our website including the following:

- Site Specific Standard Application Process
- Emission Summary and Dispersion Modelling Report (ESDM)
- Technology Benchmarking Report
- Action Plan
- Algoma Steel Manufacturing Process – Current and Future
- Standards and Emissions
- These documents can be found at the following link:

https://algoma.com/environment/site-specific-standards-applications/

Sault College & Algoma Steel Collaborations

- Partnership with Algoma Steel's Site Greening initiative and Sault College's Forestry program
- Program development and sponsorship in Mechatronics
- Apprenticeship program development and partnership
- Algoma Steel representative on the Sault College Mechanical Advisory Board and Electrical Advisory Board

Sault College & Algoma Steel Collaborations

- Ongoing discussions with the School of Business & Economics, the School of Life Sciences & the Environment, and the School of Computer Science & Technology regarding:
  - Program Development Including Masters Programs
  - Research Opportunities and Sponsorships
  - Co-op Placements/Internships
- Sponsorship and participation in the Northern Ontario Business Case Competition
- Jointly hosting monthly networking events
- Participating in the Gabegendaadowin Training

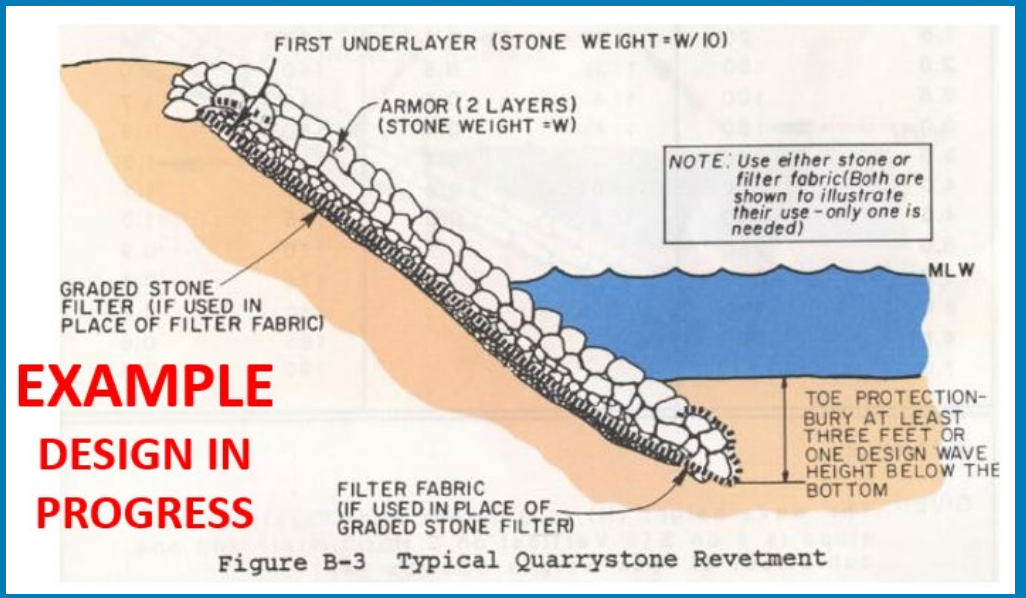
Shoreline Stabilization and Site Greening

Algoma's shoreline stabilization 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 in advance of the placement of the clean rip-rap and armour stone.

Once the stone is installed, the Site Greening Initiative will proceed in parallel with the introduction of clean soils, creating seasonal surface water ponding areas, and vegetating with select native plants and tree species.

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.



Community Liaison Committee - Next Meetings

Proposed 2023 Schedule:

- September 12th, 2023
- December 5th, 2023
- March 2024

Thank you

ALGOMA
STEEL INC.
YOUR PARTNER IN STEEL. SINCE 1901