Proposed Operational Transition to EAF

Production Method

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

A phased approach reduces implementation risk:

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.

Updated on: August 7th, 2023

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

Electric Arc Furnace (EAF) Construction Update

Project Progress

Concrete poured: est. > 15,000m3

EAF Building Foundations est. 99% complete

EAF Equipment Piling - 99% complete

EAF Equipment Foundations - Underway

Fume Treatment Plant Piling 99% complete

Fume Treatment Plant foundations – 75% complete

Primary steel for EAF building est. 15,000NT
(8,000NT Installed)

(1) Photo taken August, 2023
(2) Project Statistics as of August 1, 2023

Electric Arc Furnace Local Economic Impacts

By the Numbers

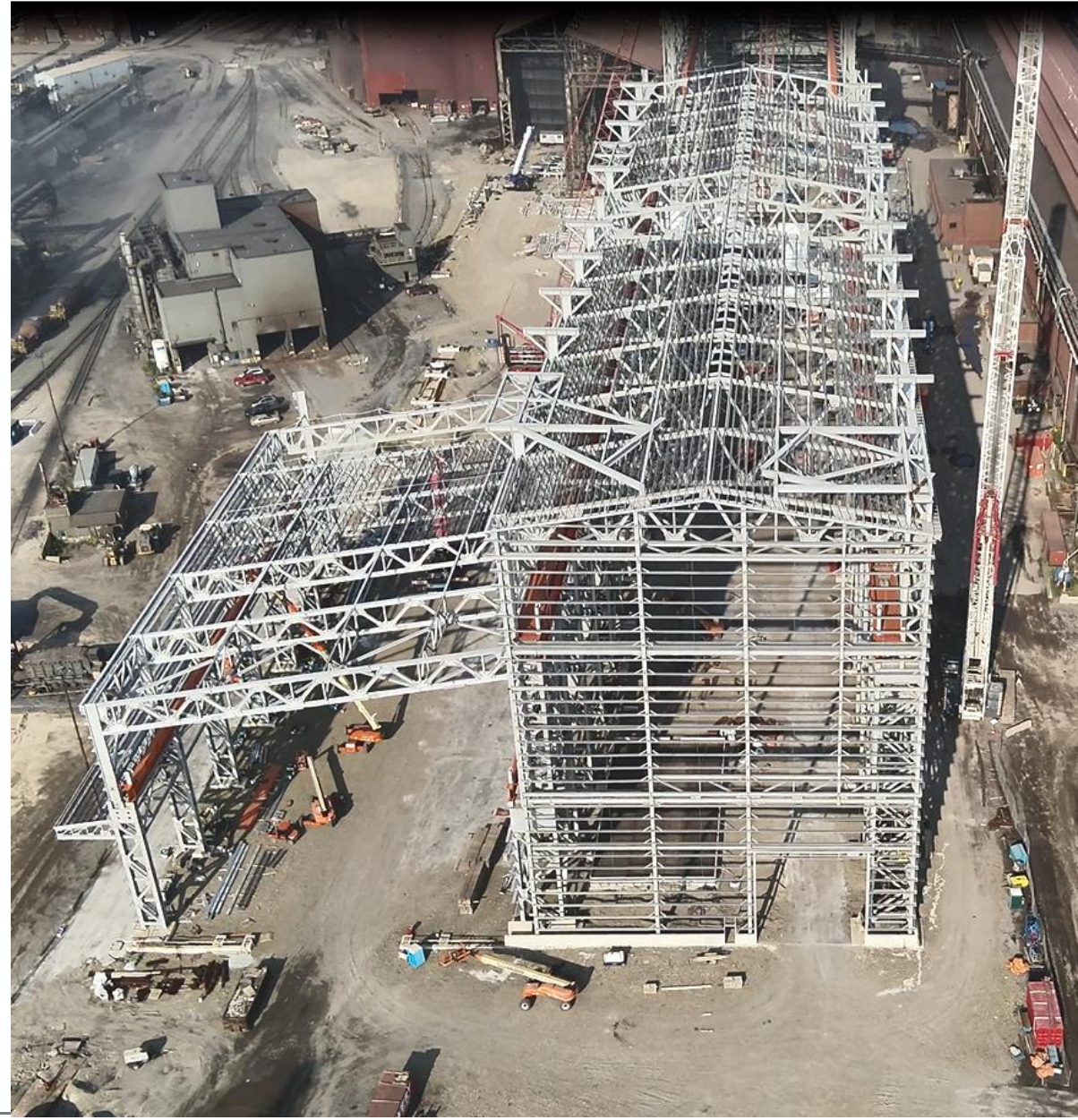
Community spend as of June 30, 2023 **$56M**

Local suppliers engaged: 47

Project spend as of June 30, 2023 **$341M**

Project budget: $828 - 878M

- **Creation of 500 construction jobs**



(1) Photo taken August 30, 2023
(2) Project Estimates as of June 30, 2023

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

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 includes:

- 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

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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.

Electric Arc Furnace Environmental Controls

Fume Treatment Plants

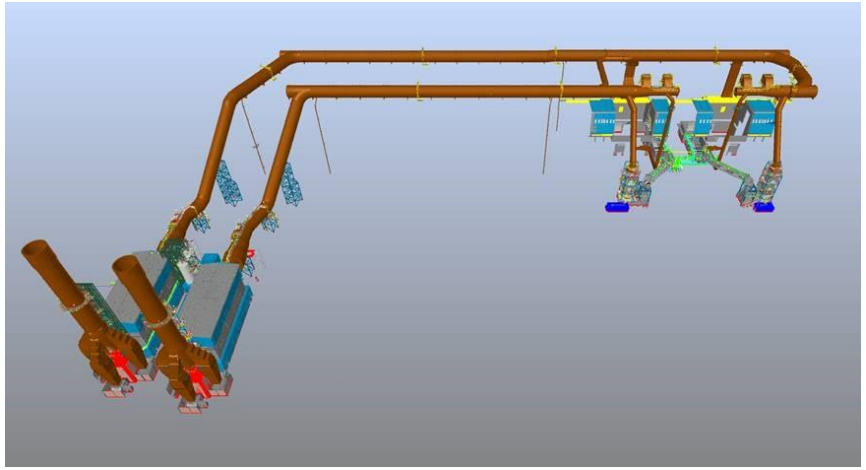
The fume treatment plants capture air and dust emissions from the process.

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

ALGOMA STEEL INC.

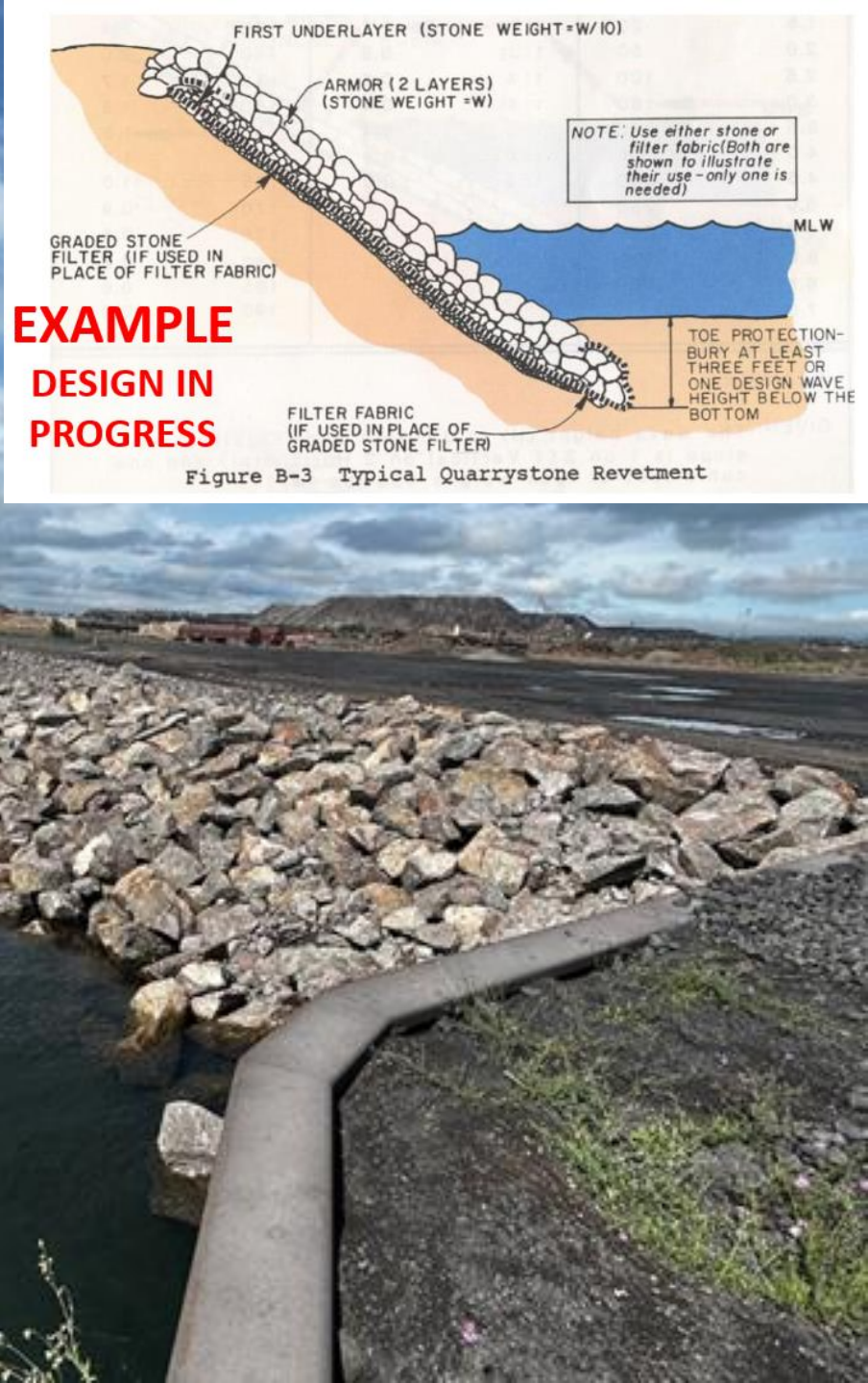
Site Greening

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 rip-rap 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.**

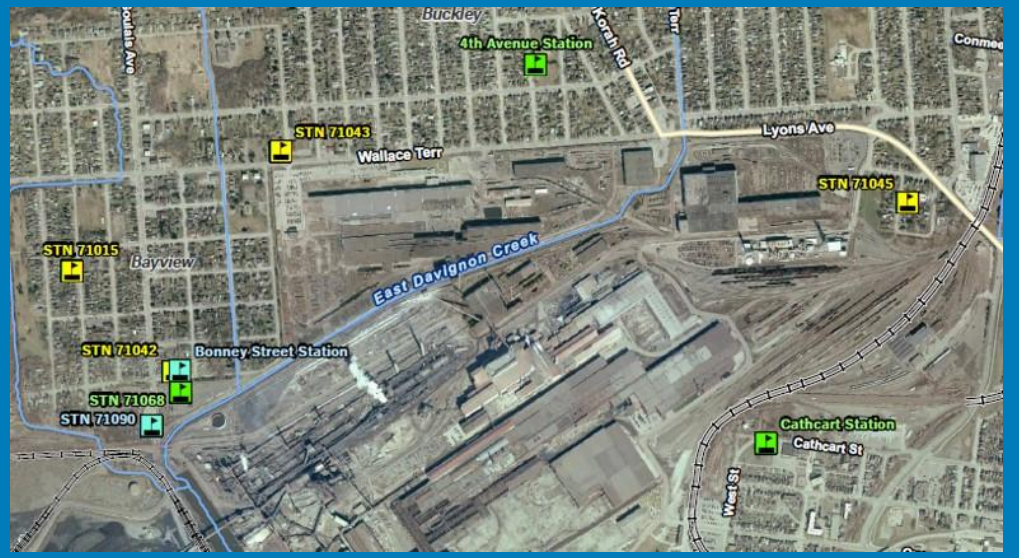
The site greening initiative involves the creation of **naturalized green buffer strips** along the perimeter of the site which will be protected from possible erosion.



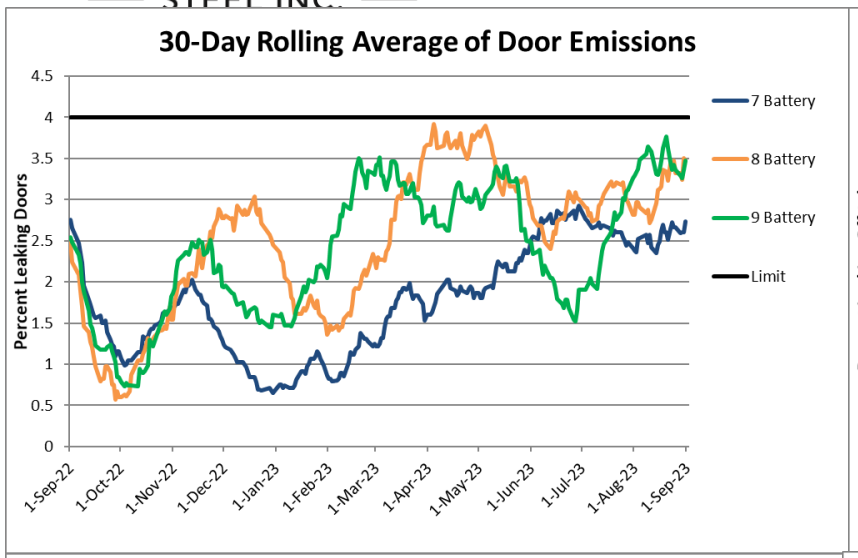
Community Air Monitoring

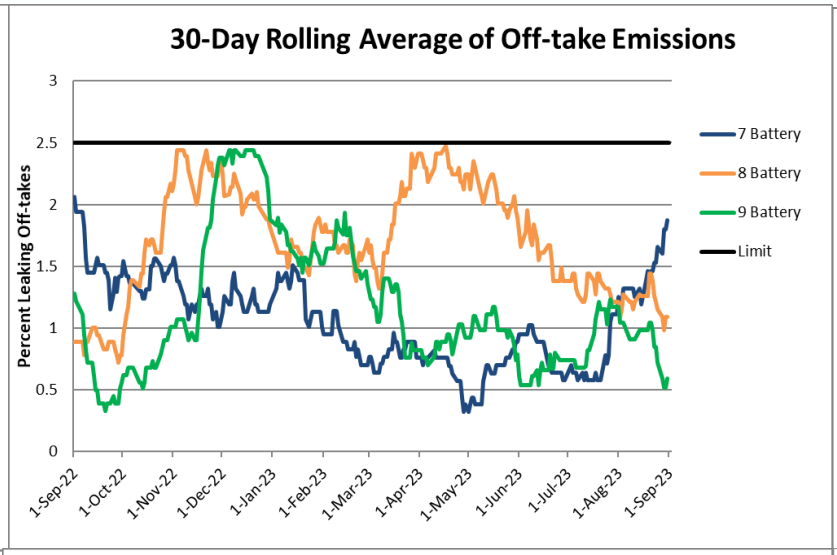
Algoma's Ambient Air Quality Monitoring Program was expanded in 2022

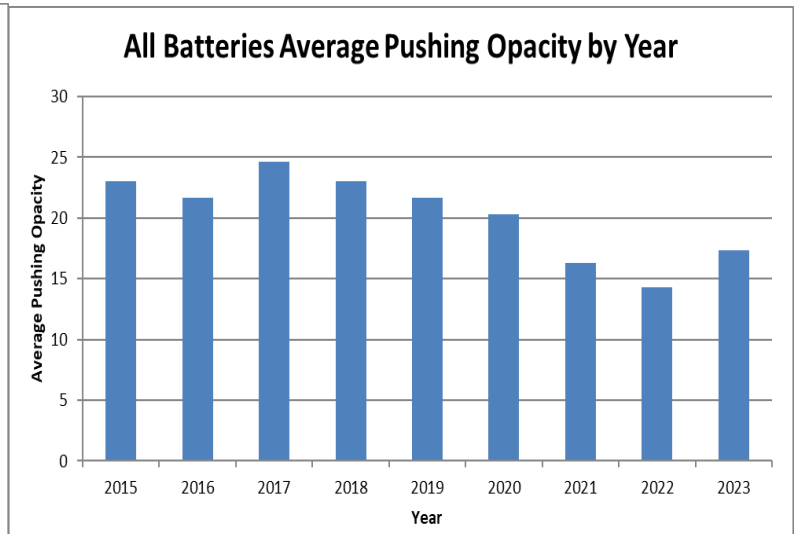
- Recently expanded AAQMP to include three new permanent community air monitoring stations installed with all new equipment and a new meteorological station which were operational since Dec. 2022
- Stations are located at Bonney St., 4th Avenue and Cathcart St.
- Site selection based on Ministry of Environment, Conservation and Parks (MECP) air dispersion modelling, MECP criteria for air monitoring station siting and local land availability
- Stations monitor for: TRS, SO2, PM10, PM2.5, TSP, Metals, VOC's, PAH's
- Real time monitoring data are published on Algoma's public website.

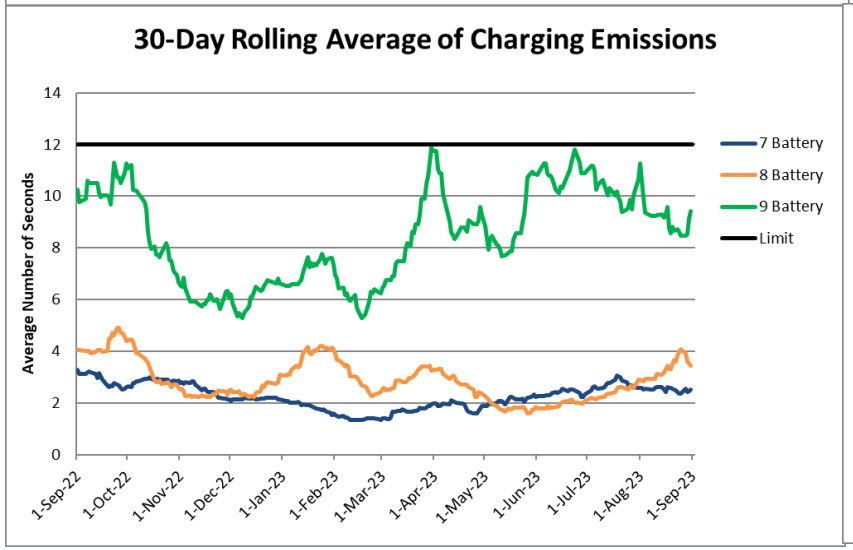


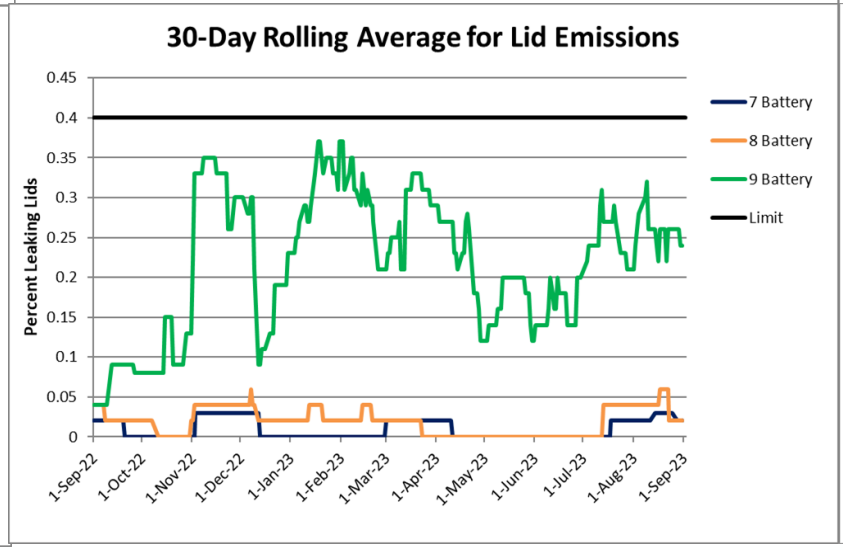
Cokemaking Emissions Performance

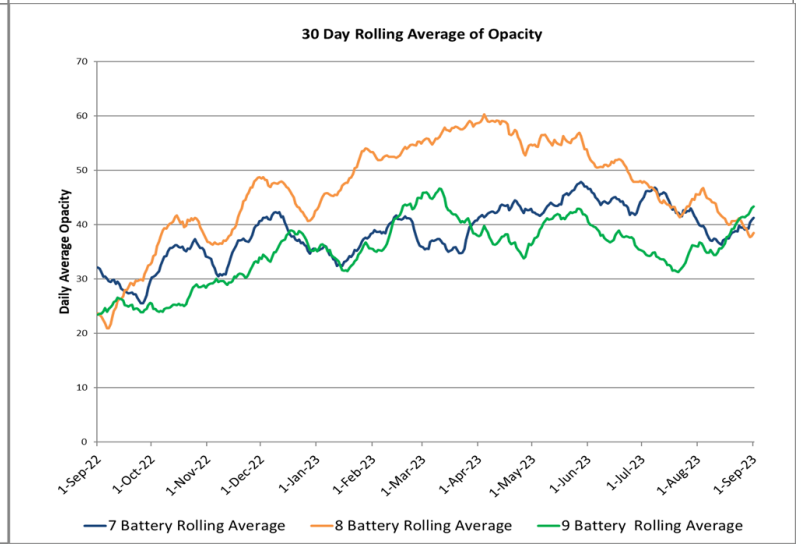












All batteries performing below leak limits

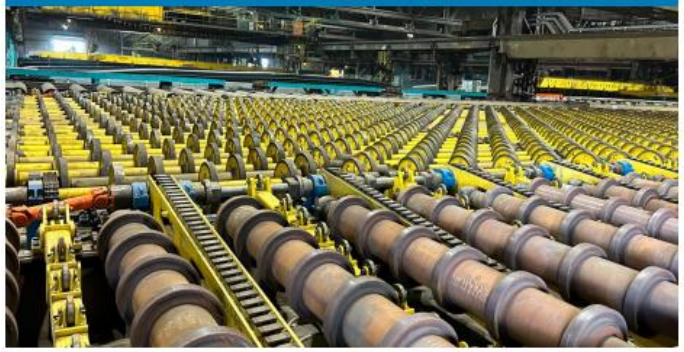
Updated: September 1st 2023

ALGOMA STEEL INC.

$135M Plate Mill Modernization

Algoma's path to higher plate production

Automated Cooling Beds



Heavy Gauge Inline Shear

Plate Piler

Robotic Plate Marking System

Plate mill modernization benefits:

Phase One - Quality focus

- New Primary De-scaler (improves surface quality) Complete
- Automated Surface Inspection System (detects and maps quality) Commissioning under way
- New Hot Leveler (improves flatness) Complete
- Automation Upgrade of the 166 Mill (expands grade offering) Installation Complete; Grade development in progress.

Phase Two - Productivity Focus

- Onboard Descaling System Upgrade for 2Hi and 4Hi
- Mill Alignment and Work Roll Offset at the 4Hi
- 4Hi DC Drive Upgrade
- In-Line Plate Cutting including new cooling beds coupling the plate mill and shear line, dividing shear and new plate piler
- Automated Marking Machine

Community Engagement

Algoma Steel is committed to being a good neighbor

- Exciting collaboration projects with Algoma University and Sault College
- Engagement with Batchewana First Nation, Garden River First Nation and Missanabie Cree
- Quarterly Community Liaison Committee meetings
- $1M Donation to Northway Wellness Centre
- Annual Employee Campaign with United Way
- And more!