

STELCO

Hamilton Works
Community Liaison
Committee (CLC) Meeting





- 1. Welcome
- 2. Review and Approval of Agenda
- 3. Review and Approval of Minutes of 28 July 2021 Meeting
- 4. Coke Battery Performance
- 5. Water Monitoring Overview
- 6. Community Feedback
- 7. Proposed Meeting Dates for 2022
- 8. Adjournment





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Coke Battery Performance – Method 303





Date	Doors (% Leaks)	Lids (% Leaks)	Off-takes (% Leaks)
2015 Thresholds (July 2 start)	54%	2%	NA
2016 Thresholds	32%	2%	NA
2017-2019 Thresholds	10%	2%	5%
2020 - 2021 Thresholds	5%	1%	4%
Jul – Sep 2021 Range (Average)	0 – 6.72% (1.30%)	0 – 2.28% (0.29%)	0 - 3.8% (0.88%)

Daily Measurements Performed

- All weekdays, except for holidays
- 6 Saturdays
- 9 Sundays

Jul – Sep Operational Adjustments

- 2 operational adjustments for doors
- 2 operational adjustment for lids

Coke Battery Performance – Method 303



Performance Review – 30-Day Rolling Avg. (Q3 2021)

Date	Doors (% Leaks)	Lids (% Leaks)	Off-takes (% Leaks)	Charging (sec) (log avg)
2015 Limits (July 2 start)	38%	0.8%	25%	12 sec
2016 Limits	22.5%	0.8%	15%	12 s
2017-2019 Limits	7%	0.8%	4.2%	12 s
2020 - 2021 Limits	4%	0.4%	2.5%	12 s
Jul – Sep 2021 Range (Average)	1.09 – 1.56% (1.30%)	0.13 – 0.4% (0.28%)	0.57 – 1.31% (0.91%)	5.04 - 7.53 s (6.35 s)

Jul – Sep Performance

• In compliance with 2021 limits

Coke Battery Performance – Method 303





Date	Pushing Emission (opacity %)	
2015 Threshold (July 2 start)	≥ 50%	
2016 – 2018	≥ 50%	
2019	≥ 40%	
2020 - 2021	≥ 30%	
Jul - Sep 2021 Range (Average)	0 – 28.33% (8.48%)	

Jul - Sep Operational Adjustments

None required

Coke Battery Performance

Additional Items



- Community Feedback
 - July 4, 2021: MECP Greenish Yellow Emissions
 - The Spills Action Centre (SAC) received a complaint about a "greenish-yellow" emission
 - Upon review of Stelco's visible emissions camera, no reportable emissions observed
 - July 10, 2021: From CLC meeting Yellow Stack Emissions (cokemaking)
 - Depending on angle of light, NO₂ emissions may appear yellow/brown
 - Factors which can affect formation of NO₂ include: coke oven gas (COG) composition in terms of NH₃ content, COG combustion conditions, flame temperature, O₂ content, moisture, atmospheric and photochemical conditions around stack outlet
 - How to address this: Continue with consistent operation of stack burner;
 supplementing battery with natural gas to enhance heating if required
- MECP to provide verbal comments



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Water Monitoring Overview



Effluent monitoring is managed under Stelco's Environmental Management System and includes:

- Monitoring MISA parameters at the plant outfalls (now under Environmental Compliance Approval – ECA)
- Monitoring City of Hamilton Sanitary Sewer By-Law parameters under the Sanitary Sewer Agreement
- Reporting to MECP and the City of Hamilton
- Reporting to Hamilton Harbour Remedial Action Plan (RAP)
 - report "net" loading (effluent minus influent concentration)





Google Earth view of Stelco

- Outfalls
- Sanitary Sewer

Water Monitoring

Hamilton Works - Water Outfalls

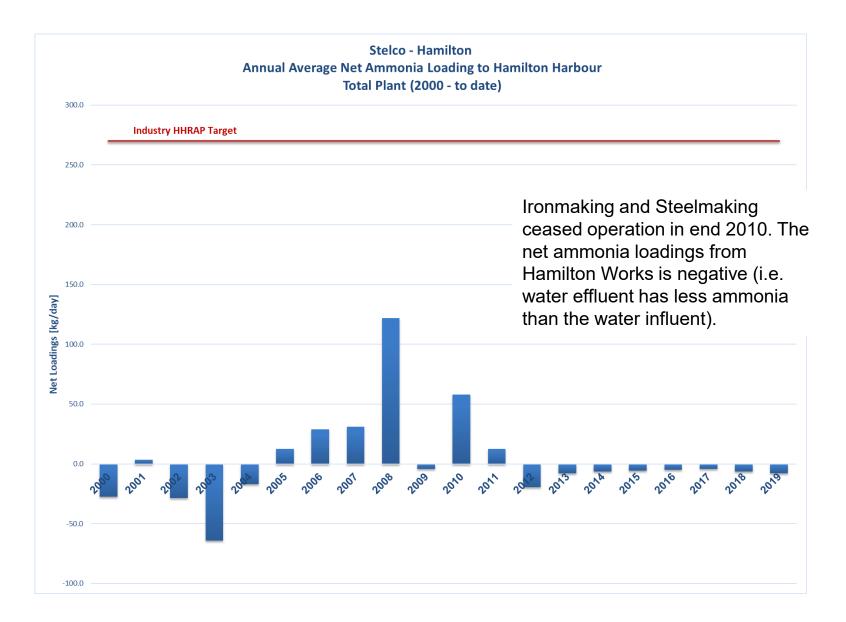


- 1. East Side Filter Plant (process water) weekly, daily, quarterly Cn, NH₄, TSS, Pb, Zn, Cr, Phenolics, B[a]P, Benzene, Naphthalene, oil & grease (O&G)
- 2. North Outfall currently not in use
- 3. 60" Sewer weekly, quarterly Cn, NH₄, TSS, Pb, Zn, Phenolics, B[a]P, Benzene, Naphthalene, O&G
- 4. Northwest Outfall weekly, quarterly (same as 60" sewer)
- 5. West Side Open Cut weekly, quarterly (same as 60" sewer)
- Acute Lethality and Chronic Toxicity quarterly
 Rainbow Trout fingerlings and Daphnia magna
- Influent #2 Bayshore Pumphouse All parameters

Hamilton Harbour RAP Loadings



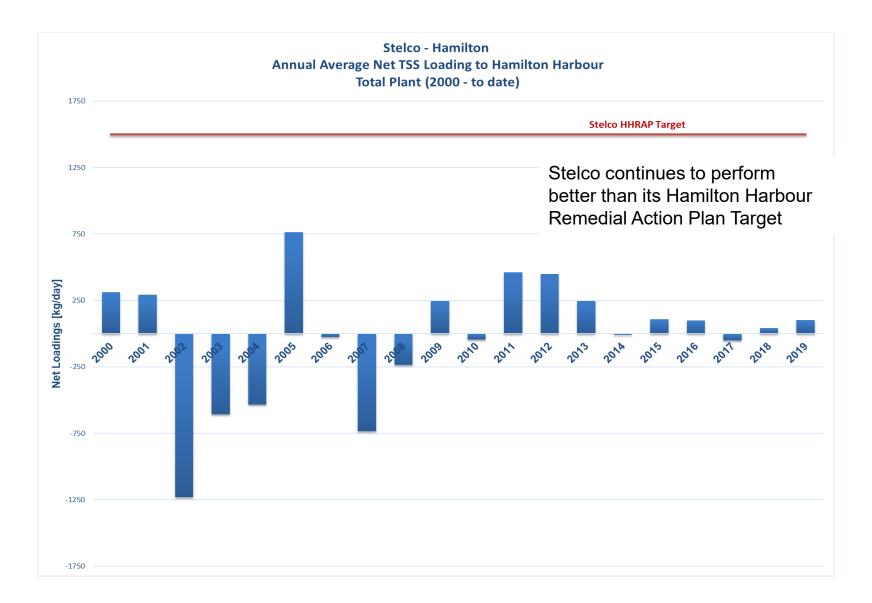




Hamilton Harbour RAP Loadings

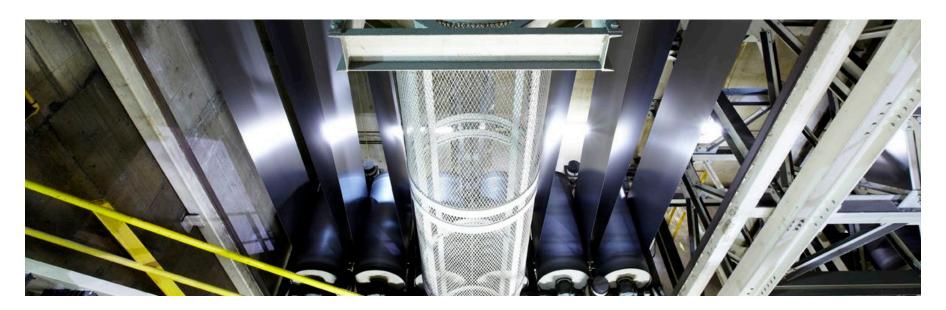






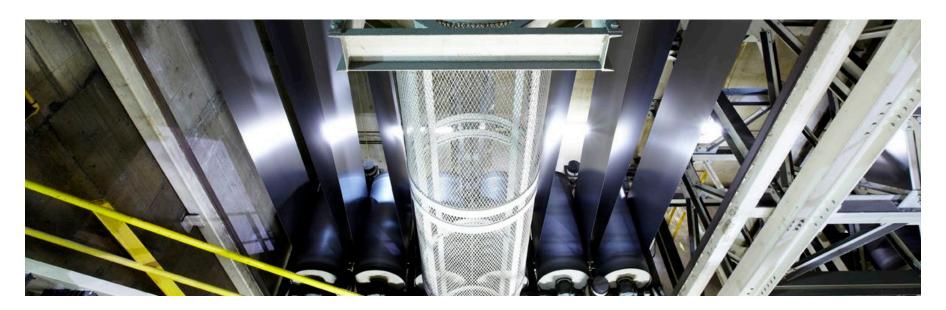


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Proposed Meeting Dates

Year 2022



- Wed. Jan. 26
- Wed. April 20
- Wed. July 27
- Wed. Oct. 26



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The Steel Company of Canada