



The Steel Company of Canada

Hamilton Works Community Liaison Committee Meeting

January 2018

Andy Sebestyen

Agenda

1. Welcome and Safety Contact
2. Review and Approval of Agenda
3. Review and Approval of Minutes of 28 Sept 2017
4. Performance under O.Reg. 419/05 Site Specific Standard Order – Particulates
5. Greenhouse Gas Reduction Projects
6. Community Concerns
7. Adjournment

Know Your Emergency Exits

Review Evacuation Routes of
the room you are located in



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Site-Specific Standard Order (Particulates): Performance Review – Daily

Date	Doors (%Leaks)	Lids (%Leaks)	Off-takes (%Leaks)
2015 Limits (July 2 start)	54%	2%	NA
2016 Limits	32%	2%	NA
2017-2019 Limits	10%	2%	5%
2020 Limits	5%	1%	4%
Jan. 1 to Dec. 31, 2017 Range (Average)	0 – 3.66% (0.12%)	0 – 1.50% (0.10%)	0 – 3.80% (0.30%)
Pushes >= 84 per day	0 – 2.75% (0.21%)	0 – 0.51% (0.11%)	0 – 1.28% (0.23%)
Pushes < 84 per day	0 – 3.66% (0.11%)	0 – 1.50% (0.09%)	0 – 3.80% (0.30%)

Daily Measurements Performed YTD

- All weekdays, except for holidays
- 10 Saturdays
- 10 Sundays

Jan. 1 – Dec. 31, 2017 Operational Adjustments

- None required – in compliance with 2017 limits



Site-Specific Standard Order (Particulates): Performance Review – 30 Day Rolling Averages

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 Limits	4%	0.4%	2.5%	12 s
Jan. 1 to Dec. 31, 2017 Range (Average)	0 – 0.36% (0.11%)	0.03 – 0.18% (0.09%)	0.08 – 0.63% (0.31%)	1.99 – 4.58 s (3.27 s)
Pushes >= 84 per day	0.15 – 0.24% (0.19%)	0.05 – 0.10% (0.08%)	0.12 – 0.21% (0.17%)	3.38 – 3.84 s (3.57 s)
Pushes < 84 per day	0 – 0.36% (0.11%)	0.03 – 0.18% (0.09%)	0.08 – 0.63% (0.32%)	1.99 – 4.58 s (3.26 s)

Jan. 1 – Dec. 31, 2017 Performance

- In compliance with 2017 limits



Site-Specific Standard Order (Particulates): Performance Review – Daily Observations – Pushing Emissions

Date	Pushing Emission (opacity %)
2015 Limit (July 2 start)	$\geq 50\%$
2016 – 2018	$\geq 50\%$
2019	$\geq 40\%$
2020	$\geq 30\%$
Jan. 1 to Dec. 31, 2017 Range (Average)	0 – 48.33 % (2.70 %)
Pushes ≥ 84 per day	0 – 48.33 % (8.79 %)
Pushes < 84 per day	0 – 40 % (2.44 %)

Jan. 1 – Dec. 31, 2017 Operational Adjustments

- None required – in compliance with 2016-2018 limit

Site-Specific Standard Order (Particulates): Performance Review – Additional Items

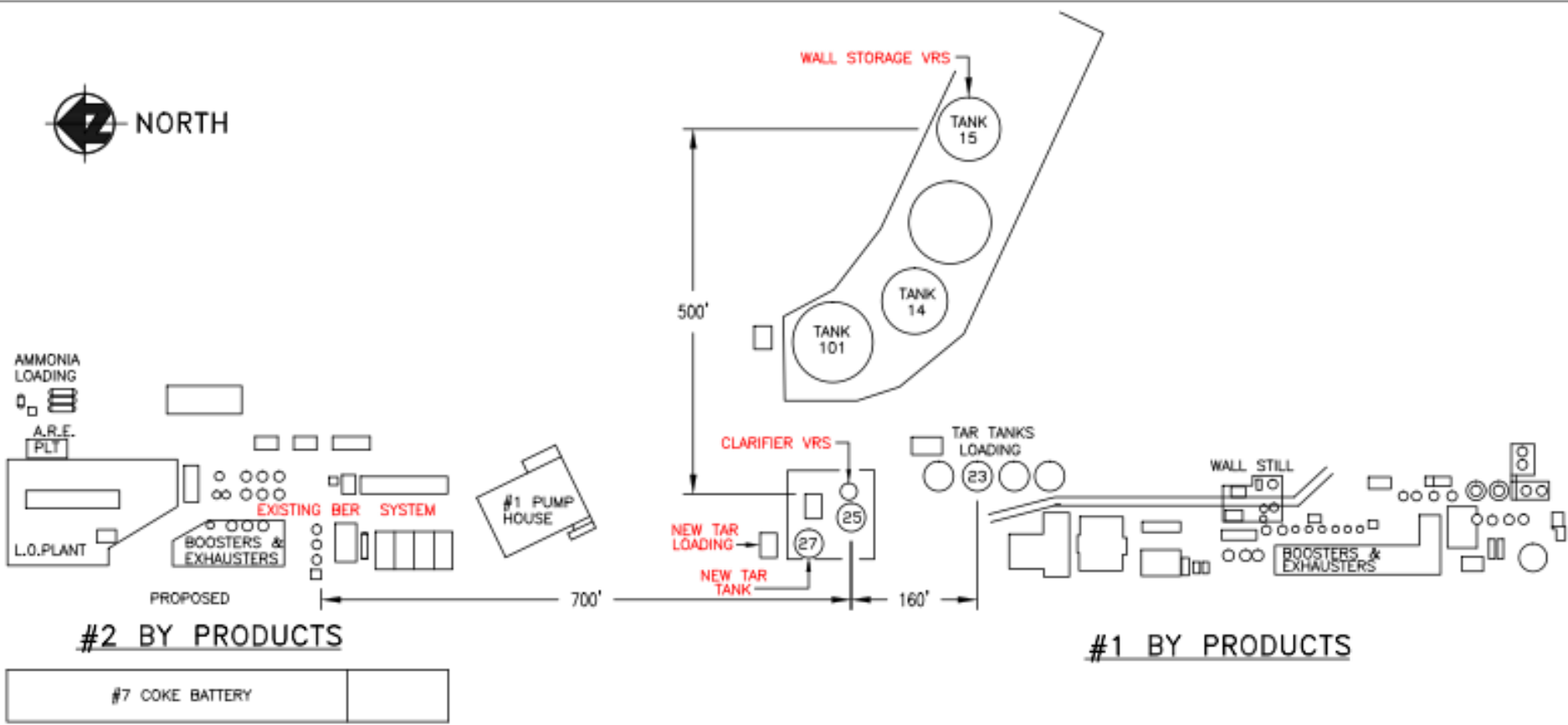
- There were 3 community complaints since the last CLC meeting:
 1. Black dust (Oct. 30, 2017 - 1 resident near St. Christopher Park area)
 2. Black dust (Jan. 8, 2018 – 2 Beach Blvd residents)

(Not specific to Stelco, but HIEA investigates and Stelco, along with AMD, helps to pay for any cleanup costs)
- MOECC will provide verbal comments

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Update – O.Reg. 419/05 Site Specific Standard Order - Benzene



STELCO BY PRODUCTS KEY PLAN



Update – O.Reg. 419/05 Site Specific Standard Order - Benzene

Problem:

- Structural weakness identified in the tar storage tank (Tank #23)

Solution:

- Rebuild another storage tank (Tank #25) and connect it to the nearby Vapour Recovery System at the Clarifier
- Reduced piping
- New tank
- Tank is located in the existing bermed area

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OCE Project #27602

Utilization of Bio-Carbon to Reduce Fossil Carbon Input Requirements for Coke Production



OCE Project #27602: Utilization of Bio-Carbon to Reduce Fossil Carbon Input Requirements for Coke Production

Applicant: Stelco Inc. - Hamilton Plant, #7 Coke Battery



OCE Project #27602: Utilization of Bio-Carbon to Reduce Fossil Carbon Input Requirements for Coke Production

Solution Provider: Walker Environmental - Thorold, Ontario



Converting Coal to Coke



- Blend of coal is charged into tall slot ovens
- Coal is heated for 18 hours at 1100°C in the absence of oxygen & converted into coke (nearly pure carbon)
- QA/QC to determine coke quality

- Coke is used in the Blast Furnace
- Coke Oven gas is processed at the By-Product Plant into fuel gas (for steam and electricity) and chemical products



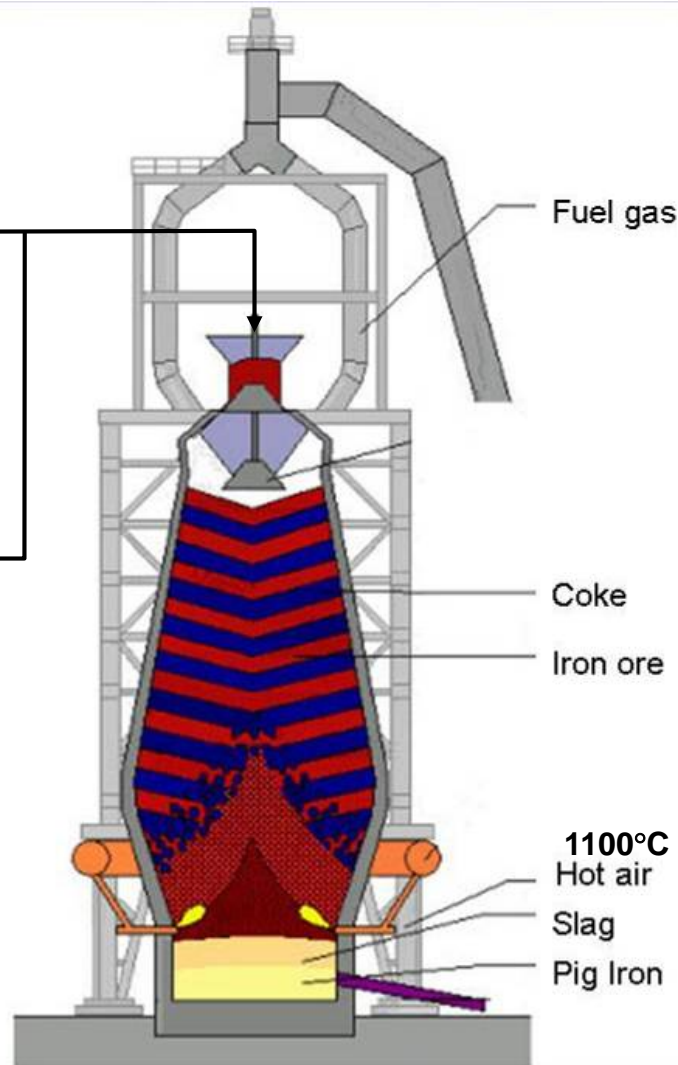
Producing Iron from Iron Ore



Iron ore & limestone



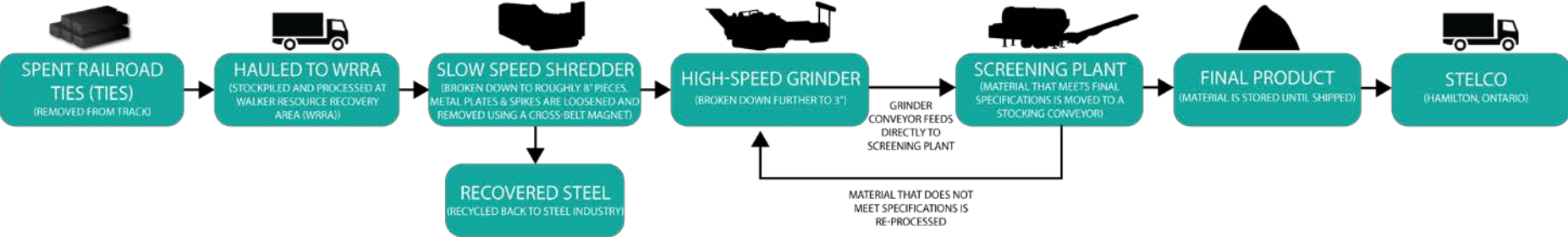
Coke



- The Blast Furnace converts iron ore into molten iron metal at 1450°C for Steelmaking
- Blast Furnace gas is used for steam & electricity



Walker Environmental Process Flow Grinding Railway Ties



Greenhouse Gas Reduction Opportunity



Replace a portion of the fossil carbon (coal) with bio-carbon (used railway ties)



Innovative technology: First application in a Canadian steel plant

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Thank You.

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