

The Steel Company of Canada

#### Lake Erie Works Community Liaison Committee Meeting

June 2018

Andy Sebestyen and Sean McNamara

- 1. Welcome and Safety Contact
- 2. Review and Approval of Agenda
- 3. Review and Approval of Minutes of 24 January 2018
- 4. Performance under O.Reg 419/05 Site Specific Standard Order Particulates
- 5. Monitoring Requirements under O.Reg 419/05 Site Specific Standard Order– Particulates; Benzene
- 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 – May 31, 2018 Range (Average)	0 – 8.3% (4.4%)	0 – 2.4% (0.08%)	0 – 6.3% (3.1%)

Daily Measurements Performed YTD

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

Jan 1 – May 31, 2018 Operational Adjustments

- May 27 Lids
- Jan 11 & April 30 Off-takes



#### 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 – May 31, 2018 Range (Average)	2.3 – 5.2% (4.2%)	0.0 – 0.2% (0.05%)	2.5 – 3.5% (3.03%)	4.7 – 6.2 s (5.46 s)

Jan 1 – May 31, 2018 Performance

• In compliance with 2018 limits



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

Date	Pushing Emission (opacity %)	
2015 Limit (July 2 start)	$\geqslant 50\%$	
2016 – 2018	≥ 50%	
2019	$\geq 40\%$	
2020	$\geq$ 30%	
Jan 1 – May 31, 2018 Range (Average)	0 – 58.3% (9.6%)	

Jan 1 – May 31, 2018 Operational Adjustments

• One required – March 15



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

- There were no community complaints regarding the Coke Battery for the period of Jan 1 – May 31, 2018
- MOECC to provide verbal comments



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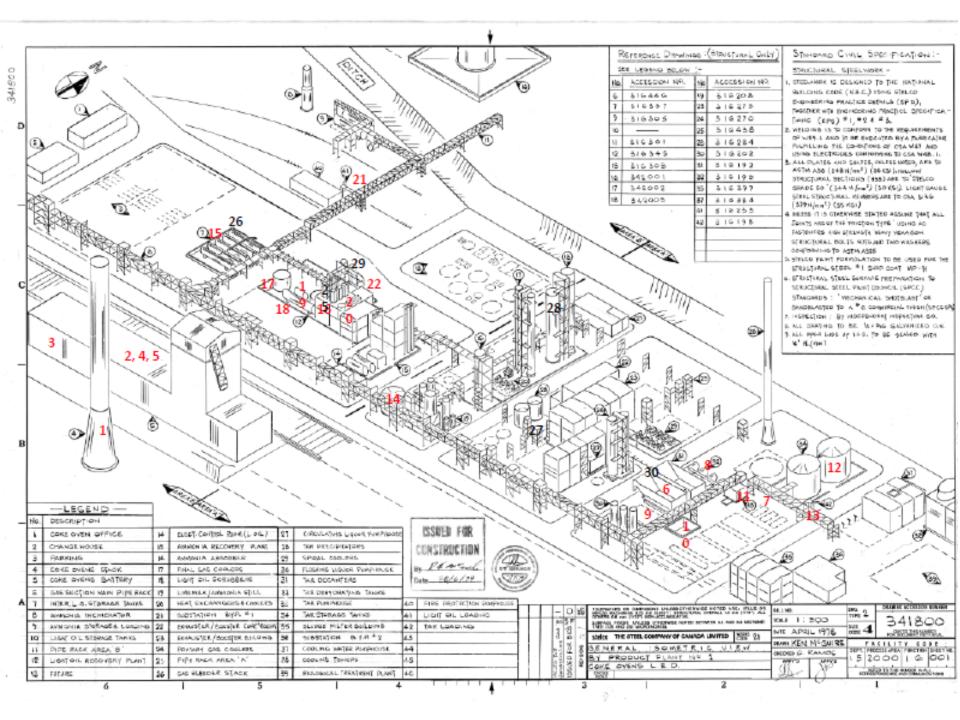
Benzene

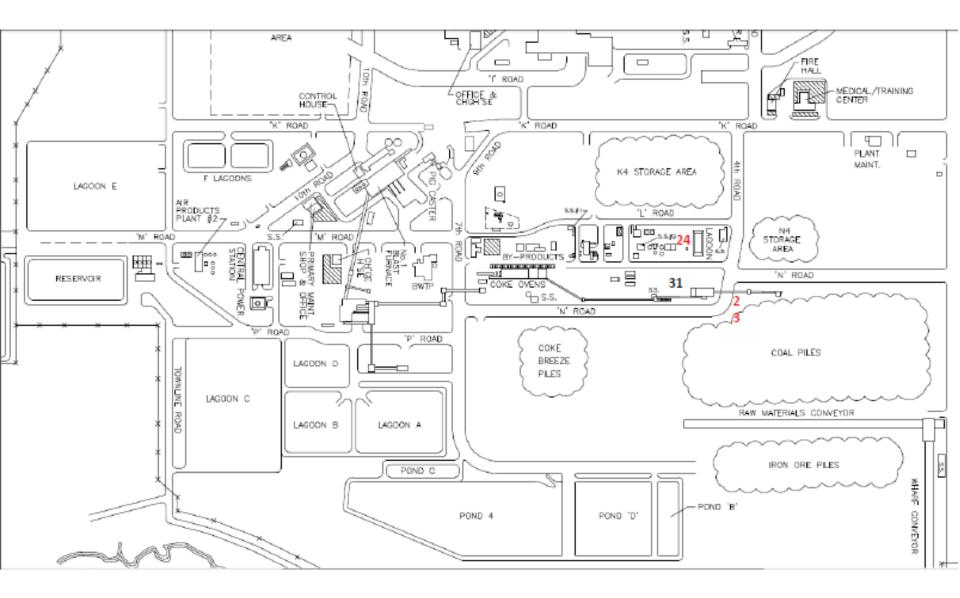
The goal is to identify additional fugitive sources of benzene to assess the quantity and frequency to answer the question, Is the source significant and can it be reduced?

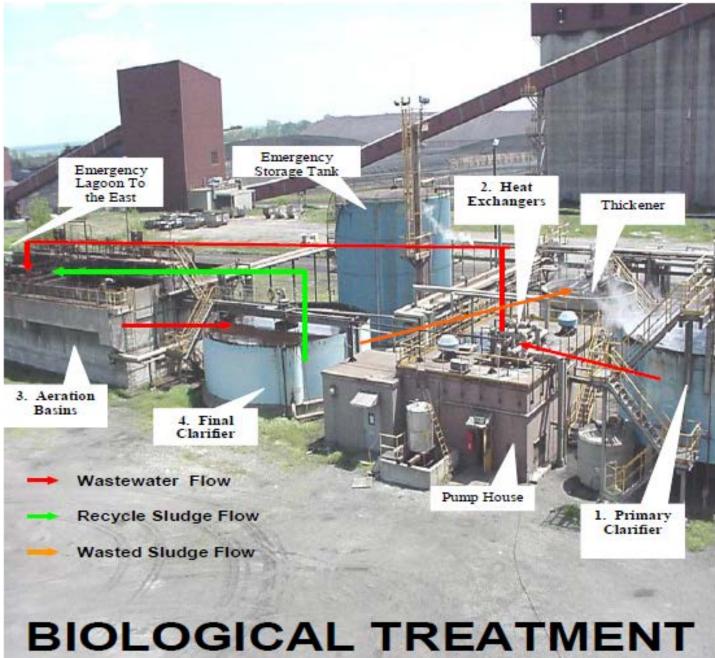
- Review the process stream to identify where benzene might report
- Monitor Hand-held with Photoionization Detector for VOCs (specific for benzene)
- Monitor the process upwind, downwind fugitive and potential emission points such as valves, vents
- Monitor at various times normal operations, maintenance activities

Stelco Lake Erie Benzene Sources (2017 ESDM Report)		
Source ID	Number Indicated on Drawing	Source Description or Title
COUS	1	Coke Battery Underfiring
СОСН	2	Coke Oven Charging
CODL	3	Coke Oven Door Leaks
COLL	4	Coke Oven Lid Leaks
COOL	5	Coke Oven Off-take Leaks
COPUG	23	Coal/tar sludge mixing and handling
BP_Tar_D_1	6	Tar Decanter
BP_Tar_D_2	7	Tar Pit
BP_Tar_D_3	8	Tar Dehydrator
BP_Tar_D_4	9	Flushing Liquor Circulation Tank
BP_Tar_D_5	10	Flushing Liquor Pit
BP_Tar_D_16_1	11	Pump Leaks
BP_Tar_D_16_2	NA	Unaccounted Leaks
BP_Tar_S_6	12	Tar Storage Tank
BP_Tar_S_7	13	Tar Loading
BP_NH3_8	14	Excess Ammonia Liquor Tank
BP_L_Oil_9	15	Light-oil Storage Tank
BP_L_Oil_10	16	Light-oil Condenser Vent
BP_L_Oil_11	17	Light-oil Intercepting Sump
BP_L_Oil_12	18	Wash-oil Decanter (2 Units)
BP_L_Oil_13	19	Wash-oil Circulation Tank
BP_L_Oil_14	20	Light Oil Separator (2 units)
BP_L_Oil_15	21	Light Oil Loading
BP_L_Oil_16_1	22	Pump Leaks
BP_L_Oil_16_2	NA	Unaccounted Leaks
WWT	24	Bio Plant

Stelco Lake Erie Benzene Sources (Not Included in 2017 ESDM Report)		
Source ID	Number Indicated on	Source Description or Title
	Drawing	Constant Old Doctoria
	25	Secondary Oil Decanter
	26	Secondary Oil Storage
	27	Condensate Pit
	28	Light Oil Scrubber
	29	Light Oil Rectifier
	30	Tar Decanter Lugger Boxes
	31	Tar Decanter Lugger Boxes Storage







## BIOLOGICAL TREATMENT PLANT LAYOUT

# Particulates / Metals

## **Particulates / Metals**

Particulates

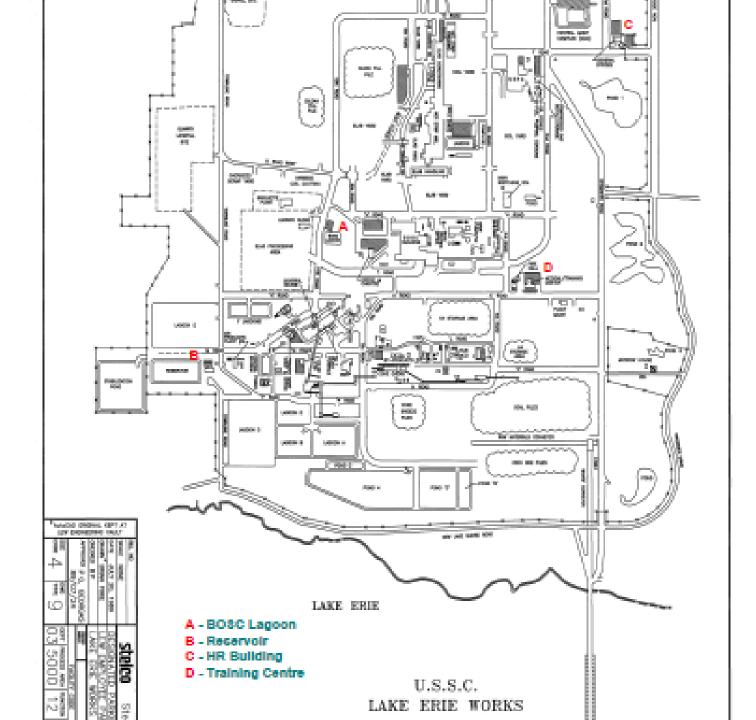
Suspended Particulate Matter (SPM)

- 24-hour Hi-Vol sample every 6 days
- 4 locations downwind of specific operations
  - Slag Processing
  - BOSC Steelmaking

#### <u>Metals</u>

- SPM Sample analyzed for Iron, Manganese, Nickel and Total Chromium
- Duplicate samples for Hexavalent Chromium (60 days)





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## Thank You.

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