

#### **COKEMAKING PERFORMANCE, Under O. Reg. 419/05:**

**AMD** ArcelorMittal Dofasco Cokemaking Operations Manager provided an update on the status of the Reg. 419 Site Specific Standard daily and 30-day rolling average requirements. Phase 28 restoration work is underway and expect to complete the work by year end.

#### **QUESTIONS**

**ENV. HAMILTON** – Requested a return of the opacity metrics chart.

**AMD COB OPER. MNGR** – Opacity in Q1 was better than Q4 of 2020.

**ENV. HAMILTON** – Lid leaks are reported at zero for both plants. How was this achieved?

**AMD COB OPER. MNGR** – Significant work has been completed to the lids to improve the condition and practices at the lids to achieve the improved performance.

**AMD ENVR. GM/DIR** – AMD will consider the request for opacity metrics for inclusion in future meetings.

**CCCM MOHAWK** – Would like to see the return of the other Coke performance data / trends.

**CCCM MOHAWK** – The door leaks at 3 Coke Plant are a challenge. What are plans to address the leaks?

**AMD COB OPER. MNGR** – 3 Coke Plant has only a 1/3<sup>rd</sup> of the ovens (and doors) as compared to 2 Coke Plant. Fewer number of doors at 3 CP, means each leak results in a larger percentage leaking. Door leaking is calculated based on the:

% leaks = number of leaking doors / total number of doors in service

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**CCCM MOHAWK** – How is compliance determined vs. the SSS limits?

**AMD ENVR. DIR/MNGR** – A conservative emission estimate from all parameters from all sources is used in annual dispersion modelling. The modelling calculates the off-site impact of emissions, which is compared to the site specific standard limits to determine compliance.

**HAM. HARBOUR RAP** – Stated that she would like to see the return of previously shared coke performance information.

**AMD ENVR. DIR/MNGR** – Similar to the comments above, AMD will consider adding this information back into future presentations.

#### **Community Inquiries:**

**AMD** ArcelorMittal Dofasco Environment General Manager provided a report on the Community Inquires received in the 1<sup>st</sup> quarter.

#### **QUESTIONS**

**CITZ. REP CROWN PH** – Inquired about the possibility of using a nasal ranger for investigation of coal / coke odours.

**HAM. MECP MNGR** – The MECP recognizes that there are some nuisance odors when there are unique weather conditions. Transitional odours are very challenging to investigate. With COVID and Provincial restrictions it's even more challenging to investigate.

**ENV. HAMILTON** – Earlier this year there was a notice issued by MECP asking industry to voluntarily minimize emissions.

**AMD ENVR. DIR/MNGR** – AMD has a voluntary procedure which was enacted to respond to notices from the MECP to minimize emission.

**ENV. HAMILTON** – What sorts of actions does the plant take to minimize emissions.

**AMD ENVR. DIR/MNGR** – Details of the procedure are not available at this time, but AMD will consider presenting for a future meeting.

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**Source:** <https://dofasco.arcelormittal.com/corporate-responsibility/environment/community-liason-committee/meeting-minutes-and-presentations>

## O. Reg. 419/05 Site Specific Standard

ArcelorMittal

### Rolling 30-day Averages

Date	Doors (% Leaks)	Lids (% Leaks)	Off-takes (% Leaks)	Charging (sec) (log avg)
2015 Limits	38%	0.8%	25%	12 s
2016 Limits	22.5%	0.8%	15%	12 s
2017-2019 Limits	7%	0.8%	4.2%	12 s
<b>2020 Limits</b>	<b>4%</b>	<b>0.4%</b>	<b>2.5%</b>	<b>12 s</b>
<b>#2 CP Q4 2020 Actual</b>				
- Range	0.76% - 1.63%	0% - 0%	1.06% - 2.84%	9.02 s - 10.65 s
- Avg.	0.98%	0%	1.71%	9.85 s
<b>#3 CP Q4 2020 Actual</b>				
- Range	13.04% - 19.92%	0% - 0%	1.53% - 2.34%	2.05 s - 5.44 s
- Avg.	15.74%	0%	1.97%	3.07 s

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## O. Reg. 419/05 Site Specific Standard

ArcelorMittal

### Rolling 30-day Averages

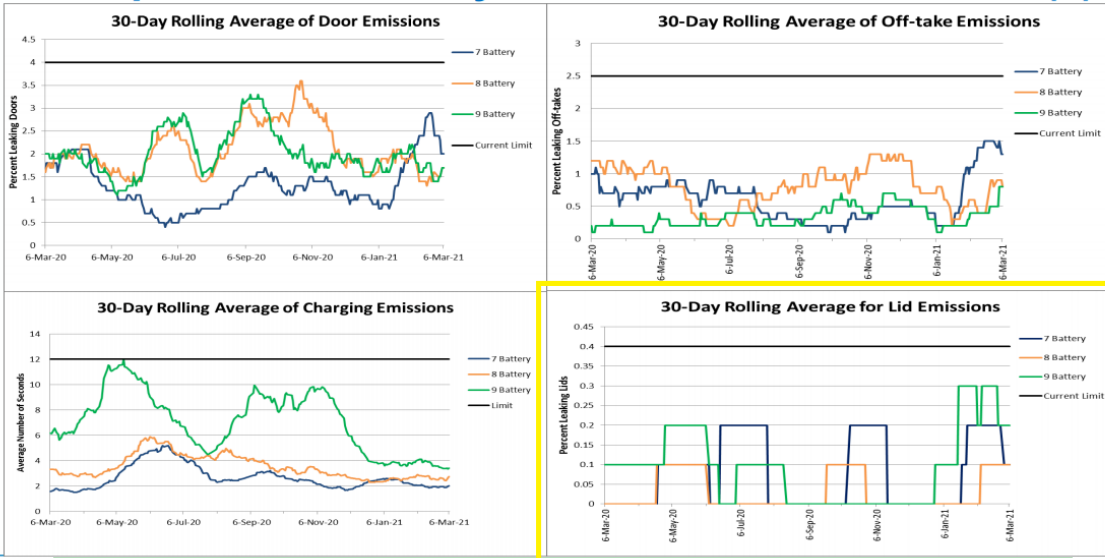
Date	Doors (% Leaks)	Lids (% Leaks)	Off-takes (% Leaks)	Charging (sec) (log avg)
2015 Limits	38%	0.8%	25%	12 s
2016 Limits	22.5%	0.8%	15%	12 s
2017-2019 Limits	7%	0.8%	4.2%	12 s
2020 Limits	4%	0.4%	2.5%	12 s
<b>2021 Limits</b>	<b>4%</b>	<b>0.4%</b>	<b>2.5%</b>	<b>12 s</b>
<b>#2 CP Q1 2021 Actual</b>				
- Range	1.63% - 2.45%	0% - 0%	1.36% - 2.54%	8.90 s - 9.77 s
- Avg.	1.92%	0%	1.89%	9.33 s
<b>#3 CP Q1 2021 Actual</b>				
- Range	11.21% - 20.42%	0% - 0%	0.77% - 3.38%	2.56 s - 4.50 s
- Avg.	16.28%	0%	1.67%	3.23 s

Note: AM Dofasco overall emissions performance is in compliance with the key SSS limits for BaP and benzene

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Source: <https://dofasco.arcelormittal.com/corporate-responsibility/environment/community-liaison-committee/meeting-minutes-and-presentations>

## Site Specific Air Quality Standard - Particulate & B(a)P



Algoma is operating below the limit for all parameters.

Algoma Steel Inc. CLC Meeting #36 Presentation, March 16, 2021, pg. 7

Source: [https://www.algoma.com/wp-content/uploads/2021/03/CLC%20%23336%20Meeting%20Presentation\\_March%2016%202021.pdf? t=1616070046](https://www.algoma.com/wp-content/uploads/2021/03/CLC%20%23336%20Meeting%20Presentation_March%2016%202021.pdf? t=1616070046)

### Coke Battery Performance – Method 303: 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
<b>2020-2021 Limits</b>	<b>4%</b>	<b>0.4%</b>	<b>2.5%</b>	<b>12 s</b>
<b>Jan – Mar 2021 Results (Average)</b>	<b>0.42 – 1.32% (0.84%)</b>	<b>0.14 – 0.38% (0.23%)</b>	<b>0.12 – 0.37% (0.27%)</b>	<b>2.06 – 4.03s (2.91s)</b>

Jan – Mar Performance  
 • In compliance with limits



### Coke Battery Performance – Method 303: Performance Review – 30 Day Rolling Averages During Rehabilitation Project (Jan – Mar 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
<b>2020 - 2021 Limits</b>	<b>4%</b>	<b>0.4%</b>	<b>2.5%</b>	<b>12 s</b>
<b>Jan 1 – Mar 31, 2021 Range (Average)</b>	<b>1.46 – 1.96% (1.69%)</b>	<b>0.00 – 0.09% (0.02)</b>	<b>1.27 – 2.37% (1.80%)</b>	<b>5.47 – 6.57s (6.01s)</b>

Jan 1 – Mar 31, 2021 Performance

- In compliance with current performance limits



*These results not reflective of typical performance due to significant battery rehabilitation.*

### Site-Specific Standard Order (Particulates): Performance Review – 30 Day Rolling Averages Prior to End-flue Rehabilitation Project

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
<b>2017-2019 Limits</b>	<b>7%</b>	<b>0.8%</b>	<b>4.2%</b>	<b>12 s</b>
2020 Limits	4%	0.4%	2.5%	12 s
<b>June 1 – July 22, 2019 Range (Average)</b>	<b>4.46 – 6.49% (5.47%)</b>	<b>0.12 – 0.47% (0.29%)</b>	<b>3.50 – 4.08% (3.81%)</b>	<b>7.13 – 7.92s (7.55 s)</b>

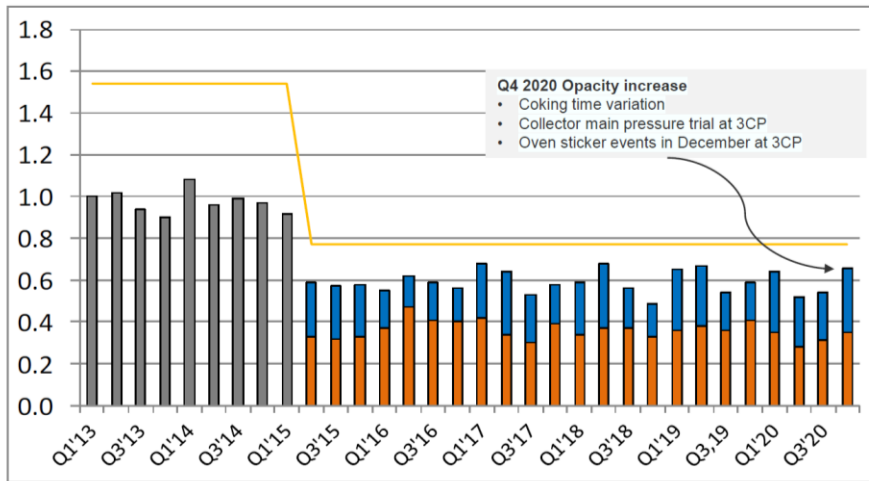
June 1 – July 22, 2019 Performance

In compliance with 2019 limits



# Total Opacity 2012 = 1.00

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Opacity Load equivalent of Opacity Value at 19.99 per cent for 1440 consecutive minutes per day - 0.01% below O. Reg 419/05 Part III Miscellaneous 46.(1) - No person shall cause or permit an emission into the air that, during a period of six consecutive minutes, obstructs the passage of light at any point by an average of more than **20 per cent**. O. Reg. 507/09, s. 32 (1).

AMD CLC Meeting Presentation, January 25, 2021, pg. 7

## COKEMAKING PERFORMANCE, Under O. Reg. 419/05:

**AMD** ArcelorMittal Dofasco Cokemaking Operations Manager provided an update on the status of the Reg. 419 Site Specific Standard daily and 30-day rolling average requirements and restoration plan. Of note in Q4 a trial was conducted examining pressure control at the #3 Coke Plant. Results showed some improvement in door leaks and an impact to the stack opacity was also observed. It was noted that Phase 27 of the restoration has been completed. John Lundrigan also explained that although there are challenges with the #3 CP door leaks and flue stack emissions at times, AM Dofasco complies with the overall Site-Specific Standard limits.

### QUESTIONS

**ENVR. HAMILTON** – What is the purpose of showing the yellow line on the opacity chart?

**AMD ENVR. DIR/MNGR** (AMD) – The yellow line represents a theoretical level from the stacks if they performed at 19.9% opacity continuously. The yellow line in this chart is not a legal / regulatory limit.

**CITZ. REP CROWN PH** – Asked if the Company is still in compliance with the Site Specific Standard (SSS) limits for BaP?

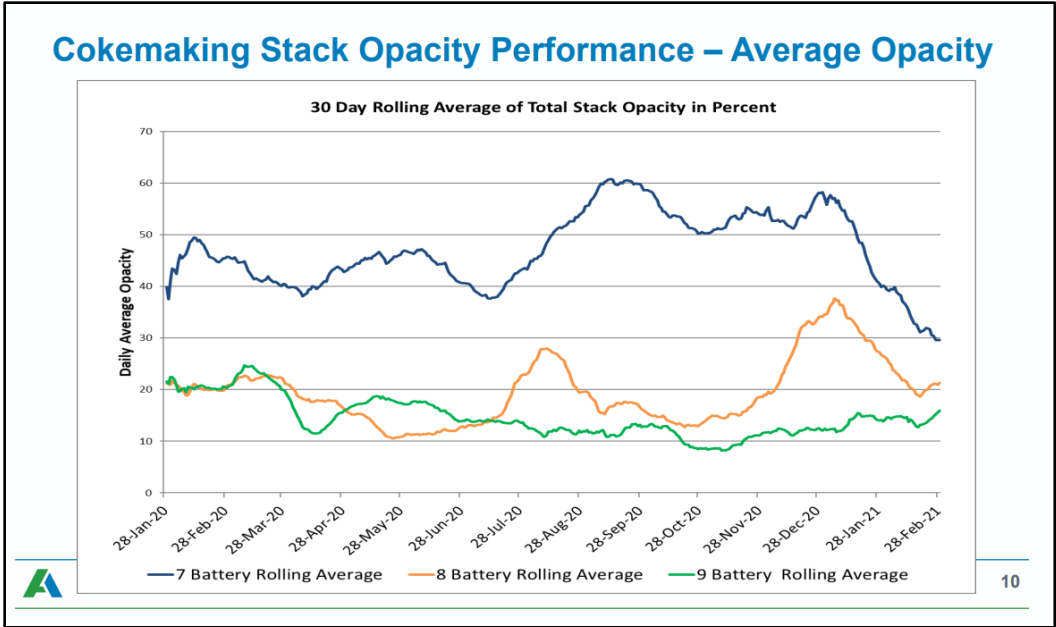
**AMD ENVR. DIR/MNGR** (AMD) – We update the modelling each year based on a conservative estimate of emissions from all facilities. Additionally, AMD completed modelling in Q4 for BaP at recent performance levels, which was still in compliance with the SSS limits.

**CITZ. REP CROWN PH** – Inquired about information related to benzene monitoring?

**AMD ENVR. DIR/MNGR** – On-site benzene monitoring was completed in 2018. This information was provided to the MECP when it was completed. Further discussions regarding future benzene monitoring are ongoing as part of the Technical Standards for Integrated Iron and Steel producers and will be communicated to the Public as part of that process.

AMD CLC Meeting Minutes, January 25, 2021, pg. 2

Source: <https://dofasco.arcelormittal.com/corporate-responsibility/environment/community-liaison-committee/meeting-minutes-and-presentations>



Algoma Steel Inc. CLC Meeting #36 Presentation, March 16, 2021, pg. 10

Source: [https://www.algoma.com/wp-content/uploads/2021/03/CLC%20%2336%20Meeting%20Presentation\\_March%2016%202021.pdf?\\_t=1616070046](https://www.algoma.com/wp-content/uploads/2021/03/CLC%20%2336%20Meeting%20Presentation_March%2016%202021.pdf?_t=1616070046)

## Reg. 419

### Site Specific Standards & Limits

Site Specific Standards  
(BaP & benzene)

#2 CP Offtakes

#3 CP Offtakes

#2 CP Lids

#3 CP Lids

#2 CP Doors

#3 CP Doors

Flue stack opacity

Other emissions

**AM Dofasco overall emissions performance is in compliance with the key SSS limits for BaP and benzene**

- AMD continues efforts to improve overall performance including door leaks and flue stack opacity

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