



August 9, 2018

Mr. Paul Widmeyer
Manager – Hamilton District Office
Ontario Ministry of Environment, Conservation and Parks

Dear Mr. Widmeyer (Paul),

Please accept this submission as Environment Hamilton's input on ArcelorMittal Dofasco's (AMD) request for an extension to the Coke Ovens Preventative Measures Order (PMO) issued to the company by the Ministry's Hamilton District Office on July 24th, 2014. As you know, this Director's Order sets out details of the actions AMD is required to take to address chronic problems at the company's coke plants. The PMO provided the company with a 5-year timeframe within which to close one coke plant and take action to refurbish the remaining two coke plants.

An Overview of Efforts to Date

Environment Hamilton has been involved in efforts to improve local air quality in our city for over 15 years now. A substantial amount of our work has focused on air pollution problems in our industrial core. We have worked to raise public awareness about the nature of industrial emissions as well as what people can do to make their concerns heard about this problem. Through our involvement in this issue for so many years, we have a solid understanding of the efforts made to date to see industry take action to address air emission problems.

Prior to 2005, Ontario's integrated steel mills, like other industries in the province, were subject to a weaker regulatory regime under Ontario Regulation 346. That old local air quality regulation did not include any regulatory limits for problem air contaminants like benzene and benzo(a)pyrene. In 2005, the province passed a new local air quality regulation, Regulation 419, and with the new regulation came new, tougher air standards for industry to meet. These changes resulted in AMD having to apply for its first set of site specific standards – **a process initiated in October of 2008**. In this first round, the company applied for SSSs for total suspended particulate (TSP) and total reduced Sulphur (TRS). The company 'voluntarily' included benzene and benzo(a)pyrene in anticipation of the tougher new standards that were being developed for these compounds – standards for which a 5-year phase-in started in 2011 with the standards coming into force on July 1st, 2016.

In September of 2009, the company released its 'Blue Skies' plan – announcing an investment that totaled \$16million to address environmental issues at the plant. But it is important to note that, of the \$16million total, **only \$8.42million was allocated to address issues at the facility's three coke plants** (see table below outlining the Blue Skies plan details). Environment Hamilton, along with community members, raised concerns about this minimal financial commitment in light of our understanding of how much work was required at the coke plants alone. In other words, we knew back then that the coke plants were in need of work and that \$8.42million would not go very far in resolving coke plant issues. The situation in 2009 also underscores the fact that it has been a significant challenge to get ArcelorMittal Dofasco to be realistic about the problems at its coke plants and to make the level of investment required to address these problems.

During this first round of SSSs, Environment Hamilton also raised concerns about the need to impose more prescriptive requirements on the company to improve coke plant performance. In our EBR comments on the SSSs, we formally requested that the US EPA rules for coke plants (Method 303) be included in the orders associated with the SSSs. Our

request was turned down by the Ministry.

"Blue Skies" Air Quality Action Plan			ArcelorMittal				
Project	Primary Contaminant	Secondary Contaminant	2010	2011	2012	2013	2014
CP1: New Door Machine	BaP	Benzene, TRS, TSP	4,900,000				
CP3: Replace Door Jamb	BaP	Benzene, TRS, TSP	1,500,000				
CP2: Pusher Side Jamb Cleaners	BaP	Benzene, TRS, TSP	750,000		500,000		
CP1.2.3: Coke Guide Pyrometers	BaP	Benzene, TRS, TSP	150,000				
CP2.3: Electronic Off-gas Controllers	BaP	Benzene, TRS, TSP	120,000				
CP1.2.3: Off-Gas Temperature Monitoring	BaP	Benzene, TRS, TSP			500,000		
CP 1.2.3 Benchmarking for Continuous Improvement	BaP	Benzene, TRS, TSP					
BP1: Improved Primary Coolers	Benzene	TRS	1,000,000	1,500,000			
BP1: Thermal Oxidizer	Benzene	TRS		1,500,000			
BP1.2.3: Leak Detection Analysis	Benzene	-	300,000	300,000	300,000	300,000	300,000
#3BF Slag Pelletizer Hood and Stack	TRS	TSP	1,500,000				
#4BF Investigate Slag Pelletizer Improvements	TRS	TSP					
CTS: Increased Road Sweeping/Flushing	TSP	-	300,000	300,000	300,000	300,000	300,000
IRON: Investigate Coffining Mobile Baghouse	TSP	-					
TOTAL:			\$16,620,000	10,220,000	3,600,000	1,600,000	600,000

On July 27, 2010, the company's first site specific standards were approved for a 5 year period – and included an action plan that set out improvements that the company had to make at the facility. The required actions mirrored what the company had set out in its Blue Skies plan and nothing more – despite the concerns raised by Environment Hamilton and community members that the \$16million commitment was woefully inadequate. While we were not satisfied with the requirements imposed on the company, we were hopeful that the action plan would result in some improvements.

But during 2012, ArcelorMittal Dofasco had some serious problems with visible emissions from the plant – and many of these emissions originated from the company's coke-making facilities. EH did a lot of Stack Watching that year, and encouraged community members to do the same by observing, documenting and reporting visible emission problems to the Ministry. We profiled some of our emission photos in a video which can be viewed here:

www.youtube.com/watch?v=A2KB-k1ios4 . Part of our message with the video was to emphasize both to the company and to the broader community that the company was not doing enough to achieve its Blue Skies vision – in fact, it seemed to be heading in the opposite direction.

In March of 2013, the Ministry **laid 13 charges against ArcelorMittal Dofasco** for opacity violations in 2012 (see story 'Dofasco Facing 13 Charges': <https://www.thespec.com/news-story/2526250-dofasco-facing-13-charges/>).

Interestingly, by June of 2013, the company announced **plans to shut down its No 1 coke plant** (see story 'Dofasco Shutting Down Coke Oven' : <https://www.cbc.ca/news/canada/hamilton/dofasco-shutting-down-coke-oven-1.1414466>).

By February of 2014, the company announced **plans to invest \$87million to refurbish its coke ovens – 10x more than what was invested for coke oven work in the Blue Skies plan** but arguably still not enough to effectively resolve coke oven issues! (see story 'Dofasco's Coke Ovens Getting an \$87m Overhaul: <https://www.thespec.com/news-story/4357191-dofasco-s-coke-ovens-getting-an-87m-overhaul/>).

On May 26th, 2014 the company was **fined \$390,000 for the opacity violations** (see story 'AMD Fined After Guilty Plea to 6 Pollution Charges: <https://www.cbc.ca/news/canada/hamilton/headlines/arcelormittal-dofasco-fined-after-guilty-pleas-to-6-pollution-charges-1.2654235>). That same month, the Hamilton District Office of the Ministry announced that a Coke Oven PMO would be issued. A draft order was posted to the provincial Environmental Bill of Rights Registry for public comment and a **final order was issued on July 24th, 2014**.

The EBR posting provided a summary of the requirements of the PMO:

The ministry is proposing to issue this Order to require the company to undertake a number of actions to reduce opacity and other coke oven contaminants associated with opacity exceedances. This proposed Order will result in the closure of coke plant #1 which accounts for up to 50% of opacity exceedances. In addition ArcelorMittal will be undertaking extensive structural work on the remaining batteries (4, 5, and 6) to improve the environmental performance at a capital investment cost of \$87 million. This work will include extensive end flue, through wall, stand pipe, and buckstay repairs. In addition, ArcelorMittal Dofasco will be undertaking comprehensive operational training for all coke oven staff to further reduce opacity incidents.

By October of 2015, AMD's application for a second round of SSSs began. This time, benzene and benzo(a)pyrene were included on the list, along with manganese and manganese compounds. The company also had to renew SSSs for TSP and TRS. **The SSSs were approved on May 18th of 2016.** Associated orders focused on coke oven rehabilitation – and finally included the requirement that the company implement the very prescriptive US EPA Method 303 to track coke oven performance and make regular adjustments on the performance and maintenance side of things in order to ensure that environmental performance improvements were realized at the coke plants. The new SSSs brought the additional benefit of far more open and transparent reporting of progress – with quarterly updates to the company's Community Liaison Committee regarding coke plants performance under Method 303, among other requirements. Prior to this change, community had no way of knowing in any detailed way whether the company was making any progress in realizing performance improvements at the coke ovens.

The Current Context

At the November 2017 meeting of the AMD CLC, we learned that ArcelorMittal Dofasco had submitted a formal request to the Ministry to extend the Coke Ovens PMO by one year – a request that **would shift the completion deadline for refurbishment activities from December 31st, 2018 to December 31st, 2019.** We also presume it would mean that **auditing and reporting requirements set out in section 2.11 of the PMO would be shifted from 2019 into 2020¹ and that 'the recommended and required repairs necessary to mitigate any deficiencies at Coke Plants #2 and #3 identified during the audit' would be shifted into late 2020 into 2021 and potentially beyond.** At that meeting, the company started a practice that has continued since then - to present timelines for refurbishment that assume a one-year timeline extension is already in place. CLC members asked for more details about the process for requesting an extension including how the process works and whether community has an opportunity to provide input. At the January CLC meeting, the Ministry (Paul Widmeyer) provided more information regarding the process for amending a PMO. We also asked company representatives why more time was required. The company 'replied that the total amount of work (both planned and unplanned) and limited physical space (how many workers can access the space) limits how much work can be completed' as noted in the meeting minutes.

Meanwhile, at several points this past spring and into the summer, Environment Hamilton and community members observed, documented and reported on-going problems with visible emissions from AMD's coke stacks and batteries (along with some significant problems from other parts of the plant – most notably blast furnace releases). The company regularly explains that the problem emissions are the result of the loss of beneficial carbon that occurs while refurbishment efforts proceed and that we may sometimes see emissions get worse before they get better. We hope they are right, but we have been waiting for many years now to see these emission challenges resolved.

¹ 2.11 As a follow-up, the Company will complete a comprehensive battery audit for Coke Plants #2 and #3 by June 30, 2019. The audit will include a thorough report detailing the recommended and required repairs necessary to mitigate any deficiencies at Coke Plants #2 and #3 identified during the audit. The Company will provide to the Ministry a copy of the 2019 audit results and recommendations by September 30, 2019. If repairs are identified in the audit, no later than September 30, 2019, the Company will provide the Ministry with a prioritized list of capital and non-capital repairs and timeline to be undertaken as a result of the audit.

Based on the above history, we hope you can understand why Environment Hamilton feels frustrated over any proposal to delay the timeline set out for ArcelorMittal Dofasco to complete the requirements of the Coke Ovens Preventative Measures Order. As we have aimed to show in the 'Overview of Efforts to Date', the problem with the company's coke plants is not a new problem. We have been engaged in efforts spanning well over a decade to get the company to invest the dollars required to resolve the environmental performance problems at their coke plants. The community has been aware of the issues at their coke facilities for a long time and has waited too long to see these improvements become reality. This is why they must now ask for more time to complete the requirements of the PMO. It is asking a lot to expect that the community can live with another year – especially given some of the visible emission problems documented and reported over recent months.

We realize that the Ministry will likely grant the requested extension, especially given that 2018 is more than half over at this point. However, we are and will continue to be opposed to AMD's request for a one-year extension for all of the reasons laid out in the history provided above. We believe it is not reasonable, given how long the company has been aware of the fact that it has problems at its coke ovens, for AMD to be requesting a one-year extension at this point in the process. Should the Ministry grant the requested extension, we urge you not to agree to any extensions beyond the current request. We also respectfully recommend that, should the rehabilitation work be completed at one or both of the plants before the end of 2019, that the requirements set out in s.2.11 of the PMO be implemented as soon as possible. This may include completing the required coke oven audit(s) prior to the end of 2019 so that any additional restoration work can be identified and the process to undertake that work initiated as soon as possible.

We thank you for the opportunity to provide input on the company's extension request.

Yours truly,

A handwritten signature in black ink, appearing to read "L. M. Lukasik". The signature is fluid and cursive, written in a professional style.

Lynda M. Lukasik, PhD
Executive Director
Environment Hamilton

cc Mili New – Director, West Central Region, Ontario Ministry of Environment, Conservation & Parks
Environment Hamilton Board of Directors