January 14, 2009

Hamilton City Council
c/o Mary Gallagher, Co-Ordinator
Council, Committee of the Whole and Budgets
City Clerk’s Division, Corporate Services
City of Hamilton
City Hall, 77 James St. North, Suite 220
Hamilton, Ontario
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Councilors,

At its meeting on November 12, 2008, Hamilton City Council approved a resolution requesting that ArcelorMittal Dofasco Inc., U.S. Steel Canada and Columbian Chemicals “provide regular quarterly updates on the progress of their abatement plans to mitigate/eliminate fallout.

I am pleased to submit this letter as ArcelorMittal Dofasco’s Q1 2009 update on this matter.

Fallout incidents - excessive emissions of Total Suspended Particulate (TSP) falling to the ground within a relatively confined geographical area and time period of time - are episodic, not systemic. They are not a regularly occurring event, but rather result occasionally from very special, upset circumstances.

Before I discuss our specific activities, it’s important to recognize that not all fallout incidents are caused by industry. In recent years, fallout incidents have occurred for which there has not been any operational upset at an industrial facility identified as the cause. While industry has a significant impact on Hamilton’s air quality, there are other sources which must be considered.

In their 2007 Progress Report, Clean Air Hamilton identified a number of other factors which also impact air quality in Hamilton, including:
• **Trans-boundary Air Pollution** originating from sources in the mid-western United States. About 50% of all pollutants in Hamilton arrive by the prevailing winds from the southwest.

• **Transportation Sources.** Roads in and around Hamilton are heavily used by automobiles and diesel trucks. Improvements in fleet performance are being offset by the increased numbers of vehicles, truck traffic, and congestion. Monitoring clearly demonstrates that transportation emissions result in very high local levels of pollutants near major roads and highways. Studies show that 50% of particulate comes from roadways, not stacks.

Fallout can also be caused by weather conditions, in concert with the unique nature of Hamilton's topography. The heat and humidity that the Hamilton area often experiences during summer months can result in a weather condition known as “atmospheric inversion”. In these circumstances, air temperature rises (instead of cooling) with increasing altitude, holding the cooler surface air down and preventing normal dispersion of particulate matter from all sources, causing it to subsequently fall to the ground.

While recognizing that fallout incidents are not necessarily industrial in nature, it is important that industries like ArcelorMittal Dofasco, U.S. Steel Canada and Columbian Chemicals manage their operations to minimize the likelihood of fallout.

With respect to ArcelorMittal Dofasco's operations, there are primarily four areas which could cause fallout:

- Coal Dust
- Blast Furnace “Bleeder Pops”
- Emissions from KOBM Steelmaking ; and,
- Beaching of excess hot metal.

**Coal Dust**

There have been isolated incidents over the past few years where Beach Strip residents have complained of black fallout on their property, allegedly a result of coal dust blowing off storage piles. After such an event in February of 2007, we retained independent experts to evaluate our dust control practices for coal and coke handling.

In their report submitted to the Ministry of the Environment, RWDI Consulting Engineers and Scientists of Guelph Ontario concluded that

"**Dofasco has in place documented policies and best management practices that show the company meets or exceeds international and national standards (e.g.**
U.S., EU and Australia). In addition, they are comprehensive and meet or exceed those practices utilized in the Canadian coal mining and processing sector.

RWDI also made 7 recommendations to assist Dofasco to further limit any potential for off-site migration of fugitive dusts from coal and coke storage and handling. All 7 of those recommendations were implemented. Specific changes include the use of a new dust suppressant on coal piles and the lowering of the wind speed condition under which increased dust suppression activities are triggered.

ArcelorMittal Dofasco is now regarded as a benchmark facility when it comes to coal dust management; a facility others look to for best practices.

Blast Furnace “Bleeder Pops”

Blast Furnace bleeder pops occur under very special circumstances and are for the most part unforeseeable. It’s worth noting that every blast furnace in the world experiences bleeder pops, despite all best efforts to the contrary.

What is a bleeder pop? On rare occasions, gas will build up in the blast furnace. For health and safety reasons and to preserve the structural integrity of the facility, bleeder valves at the top of the furnace are programmed to open to release the gas to relieve the pressure to avoid a potentially explosive situation. Unfortunately, there is no technology in place in the world to contain emissions – and the potential fallout – from a bleeder pop due to the heat and velocity from the gas expulsion.

While we cannot eliminate bleeder pops, we can and do manage the circumstances under which they occur – through the quality of coke that we use, by monitoring the raw material moisture content, and by operating our blast furnaces in a stable state whenever possible. Unfortunately, the current economic downturn and resultant decline in global steel demand has resulted in changes in the operating context of our two blast furnaces, a situation that may temporarily increase the occurrence of a bleeder pop.

On an on-going basis and regardless of operating levels at the blast furnaces, we continuously adjust our procedures and practices to minimize the effect of heavy precipitation on materials going to the blast furnace, reducing the risk of gas build-up in the furnace and the resulting sudden release of blast furnace gas.

Emissions from KOBM Steelmaking

In early 2008, we experienced equipment failure issues at our KOBM Steelmaking facility due to upset developments in the steelmaking process. When these incidents occurred, automatic alarms and safety measures kicked in, resulting in what we refer to as a “furnace laydown”. This is an automatic system that is triggered for health and
safety as well as equipment protection reasons when there is a significant process failure.

When the steelmaking furnace is laid down, it is virtually impossible to capture all of the emissions through the facility's primary and secondary exhaust systems. Some red emissions evacuate the building through roof vents and could potentially result in a fallout incident.

Throughout 2008, we implemented a number of operational changes that successfully reduced the risk of furnace laydowns being required.

To better capture emissions from furnace laydowns and to address a more systemic emissions issue we had been experiencing, in May 2008 we overhauled the hood and ductwork in the secondary emissions control system to better capture fugitive, grey charging emissions from our KOBM steelmaking facility. The $3.4 million repair, which also included the installation of a temperature feedback system to help control the rate of the charge and therefore the emissions, has resulted in a significant reduction in fugitive charging emissions from KOBM Steelmaking, reducing the likelihood of fallout.

**Beaching of Excess Hot Metal**

Beaching refers to the practice of pouring excess hot metal from the blast furnace onto the ground when there is a production imbalance between the blast furnaces and the KOBM steelmaking facility where the hot metal is used. The beached material, referred to as "cold iron" is subsequently recycled into the steelmaking process. Global steel industry benchmarking studies show that almost all integrated steelmaking plants use beaching as a standard process, although some only in emergency circumstances.

Under normal circumstances, beaching does not result in off-property emissions, nor would it cause fallout. However, during periods of extreme precipitations and high winds, there is a chance that a fallout incident could occur.

Following a highly visible beaching emission in March of 2008 (which did not result in fallout), we made immediate changes to our beaching practices, including:

- Improved drainage in the beaching and bedding-material storage areas
- Road elevation adjustments to stop water flow into the "beds" where the hot metal is poured
- Modifying cold-iron removal practices, leaving material on the ground longer to capture and utilize the ambient heat; and
- Trials alternative ground-bed materials to best minimize emissions.

In addition to managing emissions when the excess hot metal is beached, our "Primary Optimization Program" includes the installation of the infrastructure necessary to charge
hot metal at our Electric Arc Furnace steelmaking facility, thereby providing a second outlet for excess hot metal in the future. The EAF Hot Metal Delivery System is expected to be operational in Q2, 2010.

**Conclusion**

ArcelorMittal Dofasco is firmly committed to continuous improvement in its environmental performance.

We operate an extremely complex industrial facility that takes time to implement change. While the risk of industrial fallout from our facility can not be 100% eliminated, we are working to eliminate those that can be eliminated to minimize the occurrence and lessen the community impact for those that cannot be fully eliminated.

I trust this letter provides Council the update it requires related to ArcelorMittal Dofasco’s activities in minimizing the likelihood of a fallout event impacting our neighbors in Hamilton. I look forward to our continuing dialogue on this matter.

Yours truly,

Jim Stirling
General Manager, Environment
JCS/idm