US Steel – Gary, IN Enforcement Timeline, History 2003-present

February-August 2003 – **Part 63, Subpart L submissions**. All submissions found to be in compliance.

March 2003 – **NoV**: Violation identified January 2002. From 1981-March 2003, US Steel allegedly constructed and operated the North and South Hot Metal Desulfurization facilities without obtaining the required construction and operating permits, offsets, or emission control devices.

January-September 2003 – **Part 63, Subpart L submission**. Submissions found to be in compliance, with the exception of a portion submitted 9/11/03 suggesting possible noncompliance of 326 IAC 11-3 of the Indiana SIP limit for leaking doors and charging for 8/13/03.

October 2003 – **Part 63, Subpart L submission**. Company tested 84" Pickle Line, recording a result of 2.1ppm HCl. The scrubber must meet an emission concentration limit of 18ppm, or a removal efficiency of 97%, and was therefore found to be in compliance.

October 2003 – **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 of the Indiana SIP for leaking doors. The limit is 10% of observed leaking doors, and the daily average in this report showed 10.2% on 09/04/03.

December 2003 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 of the 10% leaking door standard on Coke Oven Batteries 2&3. On 11/19/2003, Coke Oven Battery #2 had a daily average of 11.82% and Coke Oven Battery #3 had a daily average of 14.58%.

December 2003 – **Visible Emissions**. The Gary Works facility was observed for visible emissions on December 6, 2003. Unfortunately due to weather conditions formal VE observations could not be taken. It was noted that one of the coke oven combustion stacks appeared to have emissions with about 15% opacity. However, due to the temperature, fog, rain, and amount of steam produced formal method 9 emissions were not conducted.

January 2004 – **Administrative Consent Order** issued for NSR/SIP violations, specifically failing to get the proper permits for the North and South Hot Metal Desulfurization facilities. The compliance program outlined requirements for a Title V application specifying limits of 0.05lb SO2/THM during all hot metal processing activities, 0.01lb SO2/THM for HMD reagent injection, and testing twice per Title V permit for compliance with the 0.05lb and 0.01lb SO2/THM limits.

January 2004 – **Case Closed**. US Steel had potentially exceeded the 40 ton per year SO2 threshold for NSR for their two hot metal desulfurization (HMD) units. The company

agreed to a 0.05lb/ton limit for the three components of HMD: deslagging, HMD injection and hot metal transfer. US Steel also agreed to a 0.01lb/ton limit for HMD injection only. This Agreed Order will reduce 102 tons per year of SO2 from the process in a non-attainment area for SO2.

April 2004 – **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On April 15, 2004, Coke Oven Battery #2 had a daily average of 10.38%.

June 2004 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10% and limits offtakes to 5%. On 06/01/2004, Coke Oven Battery #5 reported a daily average of 10.67% for leaking doors. On 06/22/04, Coke Oven Batter #3 showed a daily average of 12.5% for leaking doors.

July 2004 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 07/13/2004, Coke Oven Battery #2 reported a daily average of 10.53% for leaking doors.

August 2004 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 08/01/2004, the daily average was 13.39% for leaking doors.

September 2004 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 09/02/2004, Coke Oven Battery #5 reported a daily average of 10.53% for leaking doors.

October 2004 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 and 40 CFR 63.302 Subpart L. On 10/06/2004, Coke Oven Battery #2 reported a daily average of 14.58% for leaking doors, and Coke Oven Battery #3 also reported an exceedance of 10% for leaking doors.

November 2004 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 11/11/2004, Coke Battery #3 reported a daily average of 10.38% for leaking doors.

December 2004 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 12/2/2004, the daily average was 19.57% for leaking doors.

March 2005 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 03/25/2005, Coke Oven Battery #3 reported a daily average of 11.24% for leaking doors, and the 30-day average exceeded the 12 second limit set in 40 CFR. This entry also noted an ongoing IDEM case related to these batteries and the impending settlement.

May 2005 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 05/23/2005, Coke Oven Battery #2 reported a daily average of

12.77% for leaking doors, and Coke Oven Battery #3 reported a daily average of 13.1%. Entry also referenced an ongoing IDEM enforcement case.

June 2005 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 06/01/2005 and 06/14/2005, Coke Oven Battery #3 reported daily averages of 13.33% and 11.11% respectively, and an 8.54% leaking offtake on 06/08/2005.

August 2005 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10% and 40 CFR Subpart L. On 08/01/2005, Coke Oven Batteries #3 & 5 reported a 30-day rolling average in exceedance of the 4.3% limit.

June 2006 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 06/23/2006, Coke Oven Battery #7 reported a daily average of 10.27% for leaking doors, and from 06/16-17 reported an offtake average of 5.8 and 5.22% respectively.

July 2006 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 07/19/2006, the daily average was reported at 18.94%.

August 2006 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10% and offtakes to 5%. On 08/23/2006, Coke Oven Battery #2 reported a daily average of 5.1% for the offtakes, and Battery #7 reported an average of 12% for leaking doors.

September 2006 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10% and offtakes to 5%. On 09/20/2006, Coke Oven Battery #2 reported a daily average of 10.19% for leaking doors and on 09/26/2006 reported an average of 5.43% for offtakes.

November 2006 – **Notification of Compliance Status – Subpart FFFFF**. Tested the following equipment for compliance: #2 QBOP Hot Fume Exhaust baghouse, #3 QBOP LMF Hot Fume and Material Handling baghouse, #2 Coke Battery Mobile Scrubber Car 9121, Blast Furnace #14 Casthouse, #1 BOP South Gas Cleaning System, #2 QBOP East Gas Cleaning System, #2 QBOP West Gas Cleaning System, South Sinter Windbox Gas Cleaning System, QBOP RH Vacuum Degasser Slag Conditioning baghouse, Sinter #3 Discharge, #1 BOP North Gas Cleaning System. All emissions control equipment tested at or below limits specified in permit.

December 2006 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 10/05/2006, Coke Oven Battery #2 reported averages of 21.7% for leaking doors, 5.1% for offtakes on 10/10/2006, and 6.38% for offtakes on 10/17/2006. On 11/04/2006, Battery #7 reported averages of 10.42% for leaking doors, and 5.97% for offtakes on 11/09/2006.

March 2007 - **Part 63, Subpart L submission**. Violation of 326 IAC 11-3, no specific equipment noted.

April 2007 – **Coke Battery Emissions Inspections**. Violation of 326 IAC 11-3 which limits leaking doors to 10% and offtakes to 5%. On 04/26/2007, Battery #2 averaged 6.98% for offtakes.

May 2007 – **Coke Battery Emissions inspections.** Violation of 326 IAC 11-3 which limits leaking doors to 10% and offtakes to 5%. On 5/7/2007, leaking doors averaged 11.04% and measurement of offtakes averaged 5.48% on 5/31/2007.

May 2007 – **Coke Battery Emissions inspections**. Violation of 326 IAC 11-3 which limits leaking doors to 10% and offtakes to 5%. On 5/4/2007, Battery #2 reported an average of 5.81% for offtakes, and on 5/31/2007 Battery #7 reported 5.48% for offtakes. On 5/7/2007, Battery #7 reported 11.04% for leaking doors.

May 2007 – **Multimedia Inspection from 5/14/2007 – 05/23/2007** determined non-compliance. Inspection sheet indicates company is subject to SIPs-NAAQS, NESHAP or MACT, and Title V. Concerns identified include potential failure to maintain a record or failure to disclose a document, potential failure to maintain/inspect/repair equipment including meters, sensors, and recording equipment, potential failure to follow permit conditions, and potential excess emission in violation of a regulation. Specifically mentioned were coke oven battery charging, offtakes, pushing, and door leak limit exceedences, the majority of which were reported by US Steel in its quarterly deviation reports.

July 2007 – **Coke Battery Emissions Inspections.** Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 07/26/2007, Battery #5 reported an average of 10.71% and Battery #7 averaged 10.14% and 12% on 07/10/2007 and 07/11/2007 respectively.

September 2007 – **Coke Battery Emissions Inspections.** Violation of 326 IAC 11-3 which limits leaking doors to 10%. No specific violations cited.

October 2007 – **Coke Battery Emissions Inspections**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 10/19/2007, Battery #5 reported average of 11.03% for leaking doors.

October 2007 – **114 letter sent**. This letter lists several multimedia requests for recent modifications and relines to blast furnaces 4, 6, and 8, the production from each furnace for the past four years, flare pilot flame violations, data from control equipment in casthouses, operation and maintenance plans for HAPs, emission control methods for hot iron transfer railcars, and permits to construct/install blast furnace #14. The focus of this information request was specifically to monitor HCN, VOC, PM, SO2, opacity, and sulfur emissions data and obtain total deviation reports and records to determine compliance status. The facility was prompted to provide all excess emissions, deviation reports and stack and engineering tests conducted at coke oven batteries 2, 5, and 7, Nos.

1 and 2 BOP and Q-BOP shops and pickling lines, in addition to all performance and maintenance records for all equipment subject to 40 CFR Part 61 Subpart V from January 2002-present.

January 2008 – **HPV Determination**. Violating pollutant is SO2; violation code cited was GC1 – Failure to obtain PSD or NSR permit and/or a permit for major modifications to either.

March 2008 – **114 letter sent**. The focus of this request was to obtain technical, maintenance, inspection, monitoring, field work and incident reports pertinent to US Steel's LDAR program, specifically regarding benzene emissions from relevant sources. The company was asked to provide descriptions, data, and records detailing blast furnace relief valves and their emissions to establish a more complete summation of their LDAR activities.

March 2008 – **Semi-annual compliance report**. Violations of the 20% opacity limit were noted, but no specifics.

March 2008 – **Coke Battery Emissions Inspections**. Violation of 326 IAC 11-3 which limits leaking doors to 10%. On 3/14/08, Battery #5 reported average of 12.69% for leaking doors.

June 2008 – **Coke Battery Emissions Inspections**. Violation of 326 IAC 11-3 which limits offtake emissions to 5%. On 6/20/2008, Battery #1 reported average of 10.39%

June 2008 – **Notification of Compliance**. Pickling Line Scrubber Fume Scrubber Exhaust (?) reported at 1.13ppm HCl, within the limit of 18ppm. Stack test for HCl was 0.20ppm, also within the limit of 18ppm.

June 2008 – **NoV/FoV**, but not filed in ETS.