

N0246
MHWLL

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N024626679

FACILITY: HD INDUSTRIES		SRN / ID: N0246
LOCATION: 19455 GLENDALE, DETROIT		DISTRICT: Detroit
CITY: DETROIT		COUNTY: WAYNE
CONTACT: Henry Kijanka , Plant Manager		ACTIVITY DATE: 08/20/2014
STAFF: Jeffrey Korniski	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

INSPECTION REPORT
(PCE for an FCE source)

Date of Inspection: August 20, 2014

Date of Report: September 4, 2014

Source: HD Industries Inc. (formerly H Industries)

SRN: N0246

Address: 19455 Glendale, Detroit, Michigan 48223

Subject: Scheduled Inspection

Author: Jeff Korniski, Air Quality Division, Detroit Office

Safety Equipment/Safety Training/Security:

Steel-toed boots, hard hat, and safety glasses with side shields are recommended. Administrative staff are not present at the plant; generally, one must arrange to meet Mr. Henry Kijanka, the operator of the facility, at the plant prior to arrival.

Facility Background and Compliance History:

HD Industries (HD) is a secondary aluminum recovery operation that has been located at 19455 Glendale in Detroit since at least 2006, either under its current name or under its former name of H Industries.

Secondary aluminum recovery facilities operate furnaces to melt scrap material for the purpose of recovering aluminum. Molten aluminum oxidizes upon contact with the atmosphere. Salt fluxes, typically sodium chloride and potassium chloride, are added to the molten aluminum bath to both absorb impurities within the melt, including already formed aluminum oxide, and to act as a surface barrier to minimize further loss of the aluminum to oxidation. These impurities, collectively termed "dross", floating on the surface of the liquid aluminum are skimmed from the melt and either sent for disposal as a waste or further melted for the recovery of residual aluminum. HD utilizes a single natural-gas fired rotating barrel furnace to recover the residual aluminum from dross. Fritz Products at 255 Marion in River Rouge is the only known dross supplier to HD.

Numerous violations of air quality regulations have been identified by the AQD and cited in violation notices (LOVs or VNs) to the facility in the past eight years, including nuisance violations for discolorations impacting the property at neighboring businesses and whose cause has been attributed to the emissions from HD. In 2008, HD entered into administrative Consent Order AQD No. 7-2008 to address violations of Rules 201, 301, 310, 901, and 910. In 2011, HD accepted a pretrial settlement offer to resolve subsequent violations in the State of Michigan's 36th District Court, Case No. 11-057414.

On November 21, 2011, a stack test measured 47.4 pounds per hour hydrogen chloride (HCl) at the outlet of the baghouse controlling the exhaust gas from the dross furnace. The baghouse had no measureable effect in reducing the presence of HCl in the exhaust gas. This is a batch operation capable of cycling every 2 hours. Conservatively applying the emission of 47.4 pounds HCl to the batch (and not each hour within the batch) results in a calculated potential to emit of 104 tons per year HCl. Hydrogen chloride, also known as hydrochloric acid (CAS #7647-01-0), is identified as a hazardous air pollutant (HAP) within Section 112(b) of the Clean Air Act.

Violations

As a result of the HCl stack test, documented in the test report received February 9, 2012, the DEQ-AQD issued a Violation Notice to HD on March 30, 2012, citing the facility for violations of the following:

1. R 336.1210 –Pursuant to Rule 211(1)(a)(i)(A), a stationary source with a potential to emit of any HAP listed under Section 112(b) of the Clean Air Act in excess of 10 tons per year is a "major source" under Rule 211 and is subject to obtain and only operate in compliance with a Renewable Operating Permit (ROP) as required within Rule 210. Under Rule 210(1), a stationary source required to obtain an ROP shall not operate any emission units located at the stationary source except in compliance with the terms and conditions within the ROP, unless a timely and administratively complete ROP application has been submitted and is under review by the AQD. For a stationary source that becomes a major source after July 26, 1995 pursuant to Rule 211(1)(a)(i)(A), Rule 210(6) defines a timely application as one that is received by the AQD not more than 12 months after the stationary source commences operation such that the potential to emit of the stationary source equals or exceeds 10 tons per year of a HAP. To be timely, therefore, HD was to have submitted an ROP application in 2007. To date, the AQD has not received an ROP application from either H Industries or HD Industries. Therefore, HD was cited in violation of Rule 210 for operating a major source of HAP emissions without either having obtained an issued ROP or having submitted both a timely and administratively complete ROP application.
2. 40 CFR 63, Subpart RRR – The National Emissions for Hazardous Air Pollutants for Secondary Aluminum Production was published by the EPA on March 23, 2000 within Subpart RRR at 40 CFR, Part 63 (MACT RRR). MACT RRR regulates any secondary aluminum production facility that is a major source of hazardous air pollutants under 40 CFR 63.2 and includes notification, testing, operating, monitoring, and recordkeeping requirements for each "new and existing dross-only furnace" at such a facility (40 CFR 63.1500(a) and (b)(6)). A stationary source with a potential to emit of any HAP listed under Section 112(b) of the Clean Air Act in excess of 10 tons per year is a major source (40 CFR 63.2). As HD commenced operation of its dross-only furnace as a major source after February 11, 1999, it is a "new" furnace under MACT RRR and HD was required to be in compliance with the MACT RRR requirements upon startup of the furnace in 2006 (40 CFR 63.1501(b)). Neither H Industries nor HD Industries has submitted any of the required notifications or reports required under the MACT to demonstrate compliance with the MACT; therefore, HD was cited to be in violation of MACT RRR.
3. R 336.1201(1) – Rule 201(1) requires that an application for a permit to install provide the information required in Rule 203, including the "uncontrolled and controlled quantity of all air contaminants that are reasonably anticipated due to the operation of the proposed process equipment." (R 336.1203(1)(c)) HCl is a common air contaminant associated with aluminum recovery operations. HD's failure, as H Industries, to properly investigate the extent of HCl emissions from the dross furnace and accurate report such within the 2006 Permit to Install application was cited as a violation of Rule 201(1).
4. Special Condition 1.4 of Permit to Install No. 242-06 – Special Condition (SC) 1.4 of Permit to Install (PTI) No. 242-06, in effect at the time of the 2011 stack test, prohibited operation of the aluminum recovery furnace unless a lime injected baghouse was installed and operated properly to reduce emissions from the furnace. This special condition was incorporated into Consent Order AQD No. 7-2008 at Condition 10.A.3. Proper operation of an air-cleaning device is also required under Rule 910. The filters within the baghouse are designed to remove solid particulate matter. Lime injection is designed to provide the baghouse with a base to neutralize the acidic HCl prior to the release of the process exhaust gases to atmosphere. HD was cited to be in violation of the PTI, the Consent Order, and Rule 910 when the baghouse was determined to have achieved a control efficiency of zero percent for HCl during the stack test.

In the Violation Notice of March 30, 2012, AQD requested a written response to the cited violations by April 20, 2012; AQD further requested a complete ROP application and a Permit to Install application by May 29, 2012. Due to the nature of the violations, the AQD District Office referred HD to the AQD Enforcement Unit to seek an appropriate remedy to resolve the violations.

HD provided a written response received by the AQD on April 23, 2012 indicating that a consulting firm was to investigate the operation of HD's baghouse and that outside counsel was being sought to assist HD in the filing of the permit applications. On May 30, 2012 AQD issued a Second Violation Notice because neither a PTI application nor an ROP application had yet been received by that date.

Permits to Install Nos. 242-06B and 242-06C

HD submitted a PTI application on July 13, 2012 and PTI 242-06B was issue on December 21, 2012. As proposed by HD, a fume scrubber was to be installed after a lime injected baghouse and prior to the exhaust stack in order to further reduce emissions of HCl to atmosphere. PTI 242-06B was issued with emission

limitations for PM, PM10, PM2.5, and HCl from the exhaust gas stack at SCs I.1 through I.4 respectively. To demonstrate compliance with the emission limits and to ensure the control equipment was functioning properly, SC V.1 required a stack test by June 19, 2013 for each of the aforementioned air pollutants. SCs V.2 through 4 required operational and control equipment parameters to be documented during a compliant stack test in order to establish parametric limits for future operation of the dross furnace.

During a site visit to the facility on February 26, 2013, AQD observed a newly installed solid lime injection system for the baghouse. A fume scrubber was installed on-site but was not connected to the exhaust gas ductwork. Mr. Kijanka explained that he could not get the scrubber to work properly and that he intended for HD to comply with the air quality regulations with the lime injected baghouse only. To do so, AQD advised Mr. Kijanka a revision to PTI 242-06B was necessary. Please see AQD report N024620574. HD submitted a PTI application on April 25, 2013 and revised PTI 242-06C was issued on May 31, 2013 with the scrubber conditions removed. The stack test conditions and related monitoring operations remained, now combined within SCs V.1 through V.3, with the stack test again to be completed by June 19, 2013; this date passed without the AQD having received a plan from HD for a proposed compliance test.

Judgment in Case No. 13-286-CE, Ingham County Circuit Court

On March 13, 2013, the DEQ, represented by the Office of the Attorney General for the State of Michigan, filed a Complaint against HD (i.e. Defendant) in the Circuit Court for the 30th Judicial Circuit, Ingham County and Case No. 13-286-CE was scheduled within the court of Judge James S. Jamo. On January 22, 2014, Judge Jamo signed an Order granting the DEQ's Motion for Summary Disposition on all four Counts within the Complaint, being:

Count I – Violation of Michigan Air Pollution Control Rule 210, 2012 MR 10 R 336.1210, for Defendant's failure to apply for and obtain a renewable operating permit as a major source of the hazardous air pollutant hydrogen chloride (HCl).

Count II – Violation of Michigan Air Pollution Control Rule 201, 2008 AACS R 336.1201, for Defendant's failure to disclose in its 2006 permit to install application that it is a major source of the hazardous air pollutant HCl.

Count III – Violation of Michigan Air Pollution Control Rule 910, 1980 AACS R 336.1910, Permit to Install 242-06, and Administrative Consent Order No. 7-2008 for Defendant's failure to properly operate its air pollution control equipment to control emissions of the hazardous air pollutant HCl.

Count IV – Violation of Michigan Air Pollution Control Rule 902(g), 2008 AACS R 336.1902(g), 40 CFR Part 63, Subpart RRR, and Michigan Air Pollution Control Rule 946, 2008 R 336.1946 by construction and operation of a non-compliant secondary aluminum production facility that is a major source of the hazardous air pollutant HCl.

In a subsequent Judgment of May 6, 2014, Judge Jamo Ordered the following:

1. HD shall operate its dross furnace only in compliance with Part 55 of the Michigan Natural Resources and Environmental Protection Act, the Michigan Air Pollution Control Rules, federal Clean Air Act, and the regulations under the Clean Air Act, including: (i) Rules 210, 902(g), and 910; (ii) MACT RRR; (iii) PTI 242-06C; and (iv) AQD Consent Order No. 7-2008 – except as detailed below.
2. HD shall complete the testing requirements within SCs V.1 through V.3 of PTI No. 242-06C within 60 calendar days (by July 5, 2014) and provide a test plan to the DEQ for approval within not less than 30 days prior to the test (by June 5, 2014).
3. HD shall submit to the DEQ an administratively complete ROP application within 60 calendar days (by July 5, 2014).
4. HD and Henry Kijanka shall provide signed and dated personal and corporate tax returns to the DEQ by May 20, 2014 and thereafter the DEQ and HD shall confer and reach agreement on an appropriate civil penalty amount.

Having received none of the aforementioned documents from HD or Mr. Kijanka by the dates established within the May 6, 2014 Judgment, the DEQ submitted a Motion for Order to Show Cause, and Judge Jamo, in granting the Motion on July 17, 2014, issued an Order to Show Cause at a session of the Court to be held on August 5, 2014.

At the session of the Court on August 5, 2014, Judge Jamo issued an Order holding HD and Mr. Kijanka in Contempt for Violation of the May 6, 2014 Judgment; the Order was filed with the Court on August 6, 2014. The August 5, 2014 Order commands that "HD Industries, Inc. shall immediately cease operation of its natural gas-fired rotary dross furnace and shall not resume operation of such furnace until authorized to do so by order of this Court . . ."

Summary of Facility Visit:

The AQD has conducted periodic off-site observations of HD Industries in order to document its continued active operations. Photos taken the morning of August 20, 2014 (attached to this report) show a distinct and definite plume from the dross furnace exhaust stack and indicate HD Industries continues to operate the furnace despite the August 5, 2014 Order of the Ingham County Circuit Court.

Compliance Status:

As detailed above in this report, the Ingham County Circuit Court granted the DEQ's Motion for Summary Disposition on each of the four Counts comprising allegations by the DEQ-AQD that HD Industries was in violation of Rules 201, 210, 910, 902(g), and 946, Permit to Install No. 242-06, Administrative Consent Order No. 7-2008, and Subpart RRR of 40 CFR 63. The Ingham County Circuit Court determined HD Industries failed to comply with the remedies outlined within the May 6, 2014 Judgment of the Court and therefore has Ordered the operation of the rotary dross furnace to cease. The remedies having not been met, HD Industries remains in violation of State and federal air quality rules and regulations.

Conclusion:

HD Industries is not in compliance with its applicable requirements.

NAME Jeff Kowalski

DATE 9/4/2014

SUPERVISOR WJM