

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

DETROIT



C. HEIDI GRETHER DIRECTOR

April 4, 2017

Mr. Steve Fischer, Director of Operations Voss Industries 7925 Beech Daly Taylor, Michigan 48180

SRN: B3472, Wayne County

Dear Mr. Fischer:

# VIOLATION NOTICE

On February 14, 2017, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Voss Industries (Voss) located at 7925 Beech Daly, Taylor, Michigan. The purpose of this inspection was to determine Voss's compliance with the requirements of the federal Clean Air Act (CAA); Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Wayne County Department of Health Permits #75, C-3516, and C-4501.

As a result of the inspection, the following violations have been identified:

| Process Description  | Rule/Permit<br>Condition Violated | Comments   |
|--|-----------------------------------|--|
| Fresh Acid Tank #1<br>(17,968 gallons);<br>Fresh Acid Tanks #2<br>(17,968 gallons) | R 336.1201(1)                     | Facility installed each<br>fresh acid storage tank<br>without obtaining a<br>permit to install for the<br>tank.  |
| Hydrochloric Acid (HCI)<br>Steel Pickling Line                                     | R 336.1201(1)                     | Facility increased the<br>capacity of the steel<br>pickling line without first<br>obtaining a permit to<br>install to modify the steel<br>pickling line.             |
| Stationary Source  | R 336.1210(1)                     | The potential to emit HCl<br>exceeds 10 tons per<br>year; the stationary<br>source is operating<br>without having obtained<br>a Renewable Operating<br>Permit (ROP). |

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| Hydrochloric Acid Steel<br>Pickling Line                             | 40 CFR Part 63, Subpart CCC –<br>National Emission Standards for<br>Hazardous Air Pollutants for<br>Steel Pickling-HCI Process<br>Facilities and Hydrochloric Acid<br>Regeneration Plants          | The facility has not<br>demonstrated<br>compliance with Subpart<br>CCC.  |
|--|--|--|
| Boiler 1<br>(500 HP, ~22MMBtu);<br>Boiler 2<br>(250 HP, 8.369 MMBtu) | 40 CFR Part 63, Subpart<br>DDDD – National Emission<br>Standards for Hazardous Air<br>Pollutants for Major Sources:<br>Industrial, Commercial, and<br>Institutional Boilers and Process<br>Heaters | The facility has not<br>demonstrated<br>compliance with Subpart<br>DDDDD.  |
| Cold Cleaner   | R 336.1707(3)(a);<br>R 336.1707(4)   | During the inspection,<br>the cover on the cold<br>cleaner was open.<br>Operational procedures<br>were not posted. |

# <u>R 336.1201(1)</u>

R 336.1201(1) (also Rule 201(1)) requires that a permit to install be obtained prior to installation, construction, reconstruction, relocation, or modification of any process or process equipment which may be a source of an air contaminant, unless otherwise exempt under the AQD rules.

As a result of the inspection on February 14, 2017, it was identified that two fresh acid storage tanks (#1 and #2) were installed in late 1997. The fresh acid tanks store hydrochloric acid (HCI) that is approximately 36% by weight. The AQD rules at R 336.1284(2)(h)(iv) exempt from the requirement to obtain a permit to install only those storage vessels containing HCl at not more than 11% by weight.

In addition, Voss Industries' website lists the current (as of April 28, 2015) pickling capacity of the Voss Taylor plant at 720,000 tons of steel per year. In the June 1997 EPA document entitled "National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling – HCI Process – Background Information for Proposed Standards", the pickling capacity of the Voss Taylor plant is listed at 480,000 tons of steel per year; EPA asserts this information was obtained directly from Voss Taylor pursuant to a Clean Air Act Section 114 information submittal (based on the EPA document, this information was obtained circa 1991 to 1992).

Based on these figures, the AQD concludes Voss has increased the pickling capacity of the Taylor facility by approximately 240,000 tons of steel per year in one or more stages from the early 1990s through to 2015. In the 1960s and 1970s, Voss obtained permits #75, C-3516, and C-4501 from the Wayne County Department of Health, for the

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installation of the HCI pickling line and for the fume scrubbing system. However, none of these permits contain enforceable conditions and therefore these permits do not limit the potential to emit (PTE) of any air contaminant, including HCI, from the pickling line. Therefore, the AQD concludes that the potential to emit HCI from the pickling line increased when the steel pickling capacity of the line increased, and this represents a modification to the pickling line which required a permit to install under Rule 201(1).

The installation of fresh acid tanks #1 and #2 and the increase in the production capacity of the steel pickling line are violations of Rule 201(1). A program for compliance may include a completed permit to install application for the steel pickling line and fresh acid tanks. An application form is available by request, or at the following website: www.michigan.gov/deqair (in the shaded box on the upper right hand side of the page)

### <u>R 336.1210(1)</u>

Under the State of Michigan's Air Pollution Control law and the federal Clean Air Act, a Renewable Operating Permit (ROP) program has been developed and implemented in Michigan. This program requires major sources, including a major source of HAPs, to obtain a facility-wide air use permit. This permit serves as a mechanism for consolidating and clarifying all air pollution control requirements which apply to the source. R 336.1210(5) (also Rule 210) of Act 451, requires major sources to submit an application to the DEQ, AQD not more than 12 months after a stationary source commences operation as a major source, as defined by Rule 211(1)(a) of Act 451.

Because the steel pickling line and acid tanks do not have enforceable restrictions limiting the company's PTE to emit HCI, uncontrolled HCI emissions exceed 10 tons per year, thus classifying Voss as a major source of hazardous air pollutants (HAP) under R 336.1211(1)(a)(i) (also Rule 211). A major source of HAP is defined as any source that emits or has the potential to emit 10 tons per year of any hazardous air pollutants (HAP) or 25 tons per year of any combination of hazardous air pollutants. Hydrochloric acid is established within Section 112 of the federal CAA as a HAP.

Within Table 5-2 of EPA's June 1997 document, EPA presents emission factors ranging from 34 pounds HCl per hour, uncontrolled, to 134 pounds HCl per hour, uncontrolled, for continuous coil pickling processes with an annual capacity of less than 1.5 million tons of steel. At 720,000 tons of steel per year, the emission factors result in a PTE at the Voss Taylor facility ranging from 149 tons per year to 587 tons per year of HCl.

To date, the AQD has not received a ROP application from Voss. This constitutes a violation of Rule 210(1) of Act 451 which requires that a source not operate any emission units at a source required to obtain a ROP unless a timely and administratively complete application has been received by the DEQ. As a result of the failure to submit a timely and administratively complete application in accordance with the requirements of Rule 210(5) of Act 451, this facility has failed to obtain an "application shield".

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#### 40 CFR Part 63, Subpart CCC

On June 22, 1999, the U.S. Environmental Protection Agency (EPA) promulgated the National Emission Standards for Hazardous Air Pollutants for Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants at 40 CFR Part 63, Subpart CCC (beginning at 40 CFR 63.1155 or §63.1155). Pursuant to Section 112 of the CAA, the regulation established emissions standards for new and existing hydrochloric acid pickling lines located at major sources of HAPs.

Voss's PTE HCl exceeds 10 tpy making the facility a major source of HAPs. The facility appears to be an existing source subject to Subpart CCC per §63.1155(a)(1). The facility is in noncompliance with the portions of Subpart CCC outlined below. Language from the regulation is paraphrased for brevity.

§63.1160(a)(1) – Shall achieve initial compliance with Subpart CCC no later than June 22, 2001. At this time, the facility has not demonstrated compliance with all applicable requirements of Subpart CCC.

§63.1160(b), §63.1165(b)(3) - Shall prepare and keep on record an operation and maintenance plan for each emission control device. The plan shall be incorporated by reference into the source's Title V permit (i.e. the ROP program in Michigan). The plan shall require monitoring and recording the pressure drop across the scrubber once per Require the manufacturer's recommended maintenance at the recommended shift. intervals on fresh solvent pumps, recirculating pumps, discharge pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans. Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of fouling. Require an inspection of each scrubber at intervals of no less than 3 months. A record of each inspection, including each item under §63.1160(b)(2)(iv) be maintained and signed by the responsible maintenance official. At this time, the facility does not have an ROP. An operation and maintenance plan for each control device was provided by the company. The plan provided does not specify a frequency of scrubber inspection. According to records provided, the facility does not measure pressure drop across the Raven scrubber.

§63.1157(a)(1) and (2), §63.1161(a) and (b), §63.1162(a)(1) – Shall conduct initial performance test and establish of scrubber operating parameters. Emissions not to exceed 18 ppmv of HCI or HCI at a mass emission rate that corresponds to a collection efficiency of less than 97 percent. Conduct annual performance tests to measure the HCI inlet and outlet or the concentration of the HCI exiting the control device. An alternate schedule that is approved by the permitting authority, but no less frequently than every 2.5 years. At this time, the facility has not conducted annual testing to demonstrated compliance with HCI emission limits. Scrubber operating parameters have not been established.

§63.1162(a)(2), (4), (5) – Install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate, and if required, recirculation

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water flow rate. These flow rates must be continuously monitored and recorded at least once per shift. Operation of the wet scrubber with excursions of scrubber makeup flow rate and recirculation water flow rate less than minimum values established during the performance tests or tests will require initiation of corrective action as specified by maintenance requirements of §63.1160(b). Each monitoring device shall be calibrated not less frequently than once per year. At this time the facility has not submitted calibration records. Scrubber operating parameters have not been established.

§63.1163(a), (d), and (e) – Shall submit initial notification, notification of performance test, and notification of compliance status. At this time, the AQD has not received any notifications required under Subpart CCC.

§63.1164(a) and (c) – Submittal of test results within 60 days after each performance test. Shall report malfunctions in a semiannual report. At this time, the facility has failed to conduct annual performance tests and test reports have not been submitted. The semiannual reports have not been submitted.

#### 40 CFR Part 63, Subpart DDDDD

On March 21, 2011, the EPA promulgated the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters at 40 CFR Part 63, Subpart DDDDD (beginning at 40 CFR 63.7480 or §63.7480). Pursuant to Section 112 of the CAA, the regulation established emissions standards for new and existing industrial boilers and process heaters located at major sources of HAPs.

Because Voss is classified as a major source of HAPs (HCl), the boilers at the facility meet the definition of an industrial boiler (§63.7575), and therefore appear subject to Subpart DDDDD per §63.7485. The facility is in noncompliance with the portions of Subpart DDDDD outlined below. Language from the regulation is paraphrased for brevity.

§63.7495(b) – Must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, for existing boilers and process heaters, unless an extension has been granted per 40 CFR 63.6(i). At this time, the facility has not fully complied with Subpart DDDDD.

§63.7500(a)(1), Table 3 Nos. 1-4, §63.7500(e), §63.7510(e), §63.7515(d) – Complete a tune-up every 2 years (25 months) for boilers greater than 5 million Btu per hour and less than 10 million Btu per hour. Complete a tune-up annually (13 months) for boilers greater than 10 million Btu per hour. Complete the one-time energy assessment no later than January 31, 2016. At this time, the facility appears to conduct tune ups and inspections of the boilers on an annual basis. It is unknown if the tune ups meet all the requirements specified in §63.7540(a)(10) and (11). At this time the facility has not completed the one-time energy assessment.

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§63.7545(e) – Must submit a Notification of Compliance Status that includes each boiler or process heater before the close of business on the 60th day following the completion of the initial compliance demonstrations for all boiler or process heaters at the facility. At this time the facility has not submitted a Notification of Compliance Status.

§63.10(a)(5), §63.7550(b), §63.7550(h)(3) - Must submit boiler tune-up compliance reports. The first compliance report shall cover the period January 31, 2016 thru December of the year in which the tune up was completed and must be postmarked or submitted no later than March 15<sup>th</sup> of the reporting year that immediately follows the year in which the tune-up was completed. Subsequent compliance reports must be postmarked or submitted by March 15<sup>th</sup> of the year following the tune-up and must cover the applicable 1, 2, or 5 year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must be submitted using the Compliance and Emissions Data Reporting Interface (CEDRI) through EPA's which is accessed the Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to the Michigan DEQ, AQD and EPA Region 5. At the discretion of the Administrator, the permittee must submit these reports, in the format specified by the Administrator. At this time the facility has not submitted boiler tune-up compliance reports.

### <u>R 336.1707</u>

R 336.1707 (also Rule 707) applies to cold cleaners installed on or after July 1, 1979. Rule 707(3)(a) requires a cover be installed on the cold cleaner and the cover closed whenever parts are not being handled in the cleaner. Rule 707(4) requires operational procedures be developed and posted near the cold cleaner. During the inspection the cold cleaner was observed with the lid open and without posted operational procedures. These are violations of Rules 707(3)(a) and 707(4).

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by April 25, 2017 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

If Voss believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

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Thank you for your attention to resolving the violations cited above and for the cooperation that was extended to me during my inspection of Voss. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

Todd Zynda, P.E. Environmental Engineer Air Quality Division 313-456-2761

cc/via e-mail: Ms. Lynn Fiedler, DEQ Ms. Mary Ann Dolehanty, DEQ Mr. Chris Ethridge, DEQ Mr. Thomas Hess, DEQ Ms. Wilhemina McLemore, DEQ Mr. Jeff Korniski, DEQ