



October 15, 2021

Ms. April Lazzaro
Senior Environmental Quality Analyst
Air Quality Division
Michigan Department of Environment, Great Lakes, and Energy
350 Ottawa Avenue NW, Unit 10
Grand Rapids, MI 49503

Re: Response to Notice of Violation Letter
State Heat Treating Company, Grand Rapids, Michigan (SRN P1208)

Dear Ms. Lazzaro:

I am writing on behalf of State Heat Treating Company (SHTC) in response to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) Violation Notice (VN) dated July 27, 2021. The VN indicates that STHC violated the following requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451).

Process Description	Rule/Permit Condition Violated	Comments
<i>Burn-off Oven</i>	<i>Rule 201</i>	<i>Failure to obtain a Permit to Install</i>
<i>P-61, P-62, P-63, and P-64 continuous batch furnaces (pushers)</i>	<i>Rule 201</i>	<i>Failure to obtain a Permit to Install</i>

I. **Response to Alleged Violations:** As requested in the VN, SHTC provides the following response to the alleged violations set forth above:

- Alleged Violation #1 (Burn-off Oven):** It is our understanding that the burn-off oven was installed around 2012-2013. Although we are not certain that a Permit to Install (PTI) was required at the time of installation, STHC is willing to submit an application for a general PTI for this emission unit.
- Alleged Violation #2 (P-61, P-62, P-63, and P-64 continuous batch furnaces):** Rule R336.1282(2)(a) of the Michigan Administrative Code provides an exemption from PTI requirements for "furnaces for heat treating" that do not utilize oil quench. The text of the current rule is set forth below:

R 336.1282 Permit to install exemptions; furnaces, ovens, and heaters.

Rule 282.

(1) This rule does not apply if prohibited by R 336.1278 and unless the requirements of R 336.1278a have been met.

(2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:

(a) Any of the following processes or process equipment which are electrically heated or which fire sweet gas fuel or no. 1 or no. 2 fuel oil at a maximum total heat input rate of not more than 10,000,000 Btu per hour:

(i) Furnaces for heat treating or forging glass or metals, the use of that does not involve ammonia, molten materials, oil coated parts, or oil quenching.

No references to "oil quenching" or "ammonia" (in current exemption above) were included in Rule 282 until 1992. As shown in Attachment 1, iterations of Rule 282 preceding 1992 did not include "oil quenching" or "ammonia." Therefore, oil quenching furnaces utilized for heat treating that were installed prior to 1992 are exempt from permitting pursuant to Rule 282(2)(a)(i).

- A. **Continuous Batch Furnace P61** – P61 was installed prior to 1992 and has not been modified or reconstructed. Therefore, it is exempt pursuant to Rule 282(2)(a)(i).
- B. **Continuous Batch Furnace P62** – P61 was installed prior to 1992 and has not been modified or reconstructed. Therefore, it is exempt pursuant to Rule 282(2)(a)(i).
- C. **Continuous Batch Furnace P63** – Because P-63 was purchased in 1993, State Heat Treating Company will request permit to install for this equipment.
- D. **Continuous Batch Furnace P64** – Because we have not been able to locate a purchase or installation date for P-64, SHTC will request a PTI for this equipment.

II. **Response to Request for Additional Information:** In addition to the alleged violations, which have been addressed above, SHTC provides the following response to additional information requested in the VN:

1. **Equipment Inventory – Heat Treat Furnaces** – The VN also requested Installation, modification or reconstruction dates for all heat-treating furnaces (batch and continuous) and associated equipment. When the majority of the existing furnaces were installed, they were exempt from the requirements to obtain a permit to install. To our knowledge none of the equipment has been modified or reconstructed. An equipment inventory is included as Attachment 2, which includes the available installation dates, heat input, and associated Air PTI exemptions.
2. **Equipment Inventory – Ammonia** – The anhydrous ammonia tank was installed in 1948 and has not been reconstructed or modified. Note that the anhydrous ammonia tank is grandfathered as it was installed prior to 1967.
3. **Safety Data Sheets** – Safety Data sheets for Metclean 30LFS and Metgard WDS are included as Attachment 3.
4. **Natural Gas Usage** – 2020 facility-wide natural gas usage was 70,944 MMBtu, which is 69,552,941 cubic feet. As you requested in a phone conversation with Fishbeck, the calculated criteria pollutant emissions are provided in Attachment 4.

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Thank you for your assistance in this matter. Please feel free to contact me with any questions or comments you may have. Stephanie Jarrett from Fishbeck can also be contacted at sajarrett@fishbeck.com or (248)324-2146.

Sincerely,

STATE HEAT TREATING COMPANY



Jesse Massengill

Attachments

By email and UPS

cc/att: Ms. Jenine Camilleri – EGLE (By email and UPS)
Mr. Jason Angell – SHTC (By email only)
Mr. Matt Eugster – Varnum (By email only)
Ms. Stephanie A. Jarrett, PE – Fishbeck (By email only)