



MERCURY DISPLACEMENT INDUSTRIES, INC.

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Dear DEQ,

3/20/19



Mercury Displacement Industries, Inc. has prepared this response to the Violation Notice dated February 11, 2019 regarding the exceedances with the testing performed on January 10-11, 2019.

Date Violations Occurred: Testing has been conducted on 1/10-11/19. Subsequent testing was conducted on 2/27/19 and 3/4/19. Each time the readings from these two units exceeded the permit limits.

Cause and Duration: We are not sure of the cause but we suspect for the oven it is residual Hg in the system due to decades of use. Although mercury is not normally exposed on units placed in the oven, it is possible that over decades, mercury has accumulated in the oven/ductwork.

We are somewhat perplexed because we did not get these readings when we rented a Lumex in July, 2018. These readings in July were the only data available when the limits were established. The January readings were also with a rental Lumex. The February/March readings are with the Lumex 915 Light purchased in January. As far as duration, the exceedances only occur when the units are operating. The oven operates approximately 8 hours/ day, 4 or 5 days a week. The welder (either welder01 or welder02) operates an average of 5 hours / day, 4 or 5 days a week. The welder readings were higher than the permit limit in part because we may not have been using a good averaging time on the instrument. Adjusting the frametime to get an average value per weld cycle seems to provide more accurate readings, but not below the current limit.

Are violations ongoing: The violations appear to be ongoing based on the new instrument readings.

Summary of actions taken and proposed to correct the situation: Oven: The bottom of Oven 1 has been cleaned out. We are planning to clean the bottom of Oven 2 in the next two weeks, access to Oven 2 is very challenging relative to Oven 1. We are in the process of replacing the oven ductwork to remove any residual mercury that may be present due to decades of use. The ductwork should be replaced no later than the week April 8, 2019. Once the system is cleaned and the ductwork replaced, we should be able to obtain baseline data and submit an air permit amendment application to adjust the permit limits for these two upward. We believe some of the other limits in the permit can be decreased, this may be required to pass the air modeling. Although the welder concentration is very high, our consultant believes the extremely low flow rate will allow it to pass the air modeling without adding carbon. We plan to submit the permit application by April 19, 2019. This should prevent reoccurrence of the violations.

Sincerely,

Contactors - Relays - Switches