HORIZON ENVIRONMENTAL

September 23, 2015

VIA ELECTRONIC MAIL

Mr. Matt Deskins
Environmental Quality Analyst
Michigan Department of Environmental Quality
Air Quality Division
Kalamazoo District Office
7953 Adobe Road
Kalamazoo, Michigan 49009-5025

RE: RESPONSE TO THE AUGUST 27, 2015 VIOLATION NOTICE ISSUED TO TOEFCO ENGINEERED COATING SYSTEMS, INC.; SRN: N2610

Dear Mr. Deskins:

Toefco Engineered Coating Systems, Inc. ("Toefco") is in receipt of the August 27, 2015 Violation Notice (the "Violation Notice") issued by the Kalamazoo District Office (the "District") of the Michigan Department of Environmental Quality, Air Quality Division ("AQD"). The Violation Notice cites the following Special Conditions of Permit 225-07B (the "Permit"):

- EU-MetalCoat, SC I.2 – limiting the emission of xylene to 62.9 pounds per day;
- EU-MetalCoat, SC II.2 – limiting the coating VOC content to 3.25 pounds per gallon when in RTO bypass mode
- FG-FACILITY, SC I.1 – limiting the emission of an individual hazardous air pollutant ("HAP") to 9.0 tons per year
- FG-FACILITY – requirement for hazardous air pollutant emissions exceeding the major source threshold to be covered by a Title V Renewable Operating Permit.

Please note that Toefco discovered the potential exceedances of the emission limits cited above during the June 2015 monthly record keeping evaluation, worked with their consultant Horizon Environmental Corporation ("Horizon") to reevaluate coating content data and to assess the accuracy of the exceedances, and self-reported the exceedances associated with the June records to AQD in conjunction with the August 11, 2015 site inspection performed by District personnel. In addition, upon discovery of the potential exceedances during the review of the June records, Toefco immediately moved to restart its temporarily idled regenerative thermal oxidizer ("RTO") emission control system beginning with production on July 27, 2015.

This restart date was significantly ahead of Toefco's anticipated schedule, as a mechanical filtration pre-treatment system installation and an enhanced periodic inspection and maintenance program for the RTO is currently still pending, following the required repairs to and media replacement in the RTO, initiated following the RTO destruction efficiency stack testing attempt in August 2014. As you recall, an investigation following the stack testing attempt confirmed that the RTO thermal media was significantly fouled by silicon materials within the high temperature coatings and that the RTO poppet valves had been machined and installed improperly by the vendor. Obtaining replacement equipment and the installation of new poppet valves and thermal media occurred during the winter/spring of 2014/2015. Toefco has kept AQD informed of the RTO evaluation and repair activities and their related schedules since the stack testing attempt via regular email correspondence and telephone calls.

DATES OF VIOLATIONS

The Violation Notice specified nine (9) days in June 2015, during which the xylene daily emission limit from EU-MetalCoat of 62.9 pounds was exceeded. A review of the records in question indicated that the dates of these exceedances were as follows:

- June 1, 2015 - 77.2 lb xylene/day
- June 5, 2015 - 64.7 lb xylene/day
- June 9, 2015 - 76.2 lb xylene/day
- June 10, 2015 - 66.3 lb xylene/day
- June 11, 2015 - 63.2 lb xylene/day
- June 15, 2015 - 68.0 lb xylene/day
- June 16, 2015 - 74.7 lb xylene/day
- June 17, 2015 - 116.9 lb xylene/day
- June 18, 2015 - 88.3 lb xylene/day

In addition, a review of the records indicated that on nine (9) days during June 2015, coatings were applied on EU-MetalCoat during RTO bypass mode that exceeded the 3.25 pound per gallon limit on volatile organic compound ("VOC") content. These dates were as follows:

- June 1, 2015 - IVC KB1947HSHHT high heat black applied (3.46 lb VOC/gal)
- June 3, 2015 - IVC KB1189HSHH high heat aluminum applied (3.54 lb VOC/gal)
- June 9, 2015 - IVC KB1189HSHH high heat aluminum applied (3.54 lb VOC/gal)
- June 13, 2015 - IVC KB1947HSHHT high heat black applied (3.46 lb VOC/gal)
- June 15, 2015 - IVC KB1189HSHH high heat aluminum applied (3.54 lb VOC/gal)
- June 16, 2015 - IVC KB1189HSHH high heat aluminum applied (3.54 lb VOC/gal)
- June 18, 2015 - IVC KB1189HSHH high heat aluminum applied (3.54 lb VOC/gal)
- June 20, 2015 - IVC KB1947HSHHT high heat black applied (3.46 lb VOC/gal)
- June 23, 2015 - IVC KB1189HSHH high heat aluminum applied (3.54 lb VOC/gal)

As noted previously, a review of the June 2015 records indicated that FG-Facility opt-out emission limits for an individual HAP (xylene) were exceeded. The 12-month rolling xylene emissions determined for the end of June 2015 were 10.2 tons per year.

EXPLANATION OF THE CAUSE AND DURATION OF VIOLATIONS

The major underlying causes of the violations are as follows:

1. As described in responses to AQD following the RTO destruction efficiency stack testing attempt during August 2014, Toefco determined that the RTO had been installed by the vendor with significant mechanical deficiencies (e.g., the flow direction-controlling poppet valves had been improperly machined and did not seat properly when closed). In addition, an unanticipated residue of silicon dioxide, a byproduct of thermal control of the high-performance paints applied on EU-MetalCoat, had effectively blinded the upper surface of the thermal transfer media within the RTO, significantly reducing the cross-sectional flow surface through the media and similarly the control effectiveness. The repairs required to the RTO included replacement of the poppet valves and shafts, and removal and replacement of all thermal media. The significant timeframe required to complete these repairs required the operation of EU-MetalCoat in bypass operation. While these mechanical replacements had been completed by May 2015, the RTO had not yet been brought back on line because Toefco was working with another vendor to install a RTO inlet mechanical pre-filter, and to implement an enhanced inspection and maintenance program in an attempt to minimize the impacts of the silicon-components with the high performance coatings applied and RTO downtime, and to maximize the thermal media's operational lifespan.
2. During May and June 2015, the level of Toefco's coating operations were significantly increased to compensate for a planned operational shut down for maintenance during early July 2015, in order to make up for the planned loss in production during that time.

The specified Permit violations are not ongoing, because of Toefco's immediate response of restarting the RTO emission control following the discovery of the Permit exceedances. Operation of the RTO provides sufficient VOC/HAP control efficiency that the daily xylene limit is not exceeded at the current coating application rate for EU-MetalCoat. Further, the current operation of the RTO removes the 3.25 lb VOC/gal limit for coatings applied on EU-MetalCoat, which is only in effect during RTO bypass mode operations.

CORRECTIVE ACTION TAKEN

The following corrective action has already occurred to correct the specified violations:

- Restart of the Existing RTO Emission Control System – As noted previously, the RTO control system was restarted for coating operations on EU-MetalCoat beginning on July 27, 2015, immediately following the discovery of the potential Permit exceedances (and well in advance of the AQD inspection and subsequent issuance of the Violation Notice).

STEPS TO BE TAKEN TO PREVENT A REOCCURRENCE

Continuous operation of the RTO emission control system during coating operations provides the best method for avoiding a reoccurrence of an exceedance of the daily xylene emission limit from EU-MetalCoat, and the VOC concentration limit for coatings applied by EU-MetalCoat when operating in

RTO bypass mode. Therefore, Toefco is taking the following step to minimize the potential for unanticipated RTO shutdowns during future operations.

- Installation of an RTO Mechanical Pre-Filter and Initiation of an Enhanced RTO Inspection and Maintenance Protocol – Toefco continues to work with an RTO operations vendor to obtain and install a pre-filtration system intended to minimize the level of particulate silicon components of the high-performance coatings applied on EU-MetalCoat from reaching the RTO combustion chamber and thermal media beds. Toefco currently anticipates installation and activation of the pre-filter system by December 31, 2015. In addition, Toefco proposes to initiate an enhanced inspection and maintenance protocol in which the thermal media surface and RTO internals will be regularly inspected for potential silicon dioxide residues, and maintenance programs will be implemented to mitigate those residues, as necessary. Toefco anticipates implementation of this protocol by the end of 1Q 2016. Updates to the malfunction abatement plan ("MAP") required within the existing Permit will be submitted to District AQD for review and approval.

ADDITIONAL ACTIONS

Because the rolling 12-month xylene emission rate at the end of June 2015 was 10.2 tons per year, the requirement to obtain a Renewable Operating Permit ("ROP") for the facility has now been triggered. Accordingly, it is no longer necessary to maintain enforceable opt-out HAP limits for the facility. Further, the change in major source status results in a future compliance requirement with the applicable provisions of 40 CFR Part 63, Subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products.

- PTI Application to Remove Current Opt-Out Limits in the Permit – Toefco will prepare and submit a PTI application to AQD, requesting the removal of the current HAP opt-out limits contained in the Permit under FG-Facility. The application will contain anticipated actual HAP emission levels from the Toefco plant. Toefco anticipates submission of an administratively-complete PTI application to the AQD by October 30, 2015.
- ROP Permit Application for the Toefco Facility – Toefco will prepare and submit an application for an ROP covering the facility. The application will contain information required to incorporate the requirements of the existing and proposed PTIs, four existing general air permits covering qualified operations at the facility, exempt equipment/operations at the facility, as required, and additional applicable federal regulatory requirements. Pursuant to R 336.1210(6) of Michigan's Administrative Rules for Air Pollution Control (PA 451 of 1994, as amended), for a stationary source that becomes a major source, an administratively complete application for a ROP will be considered timely if it is received by the department not more than 12 months after the stationary source commences operation as a major source. In order to beat this requirement deadline, Toefco anticipates submission of a Title V permit application to AQD by March 31, 2016.
- Compliance with Part 63, Subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products – Toefco will develop a program to comply with the applicable requirements of Part 63, Subpart MMMM. Pursuant to 63.3883(c)(2), for any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is one year after the area source becomes a major source or 3 years after January 2, 2004, whichever is later. In order to

beat this requirement deadline, Toefco anticipates compliance with the applicable portions of Subpart MMMM by March 31, 2016. Subsequent notification of the compliance status of the Toefco facility will be submitted as specified under 63.3910(c).

In addition, Toefco proposes to evaluate the current coating usage and emission estimating tracking methods utilized, with an eye toward providing enhanced emission projections, real-time coating usage and emission values, and coating line usage tracking, especially for those periods when necessary to operate EU-MetalCoat in RTO bypass mode. Based upon the results of these evaluations, Toefco will incorporate additional assessment, record keeping, and notification parameters into the current coating systems tracking program at the facility.

-o0o-

Should you have any questions or need additional information, please feel free to contact Mr. Artie McElwee of Toefco at (800) 555-6495, or me at (616) 554-3210, at your convenience.

Sincerely,

HORIZON ENVIRONMENTAL CORPORATION

Brian P. Greenwald, P.E.
Senior Project Engineer

c: Mr. Artie McElwee, Toefco
Mr. Brian Leahy, Horizon