

PVS CHEMICALS, INC.

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Air Quality Division Detroit Office

November 3, 2015

VIA FED EX

Mr. Jonathan Lamb
Senior Environmental Quality Analyst
Air Quality Division
Department of Environmental Quality
Detroit Field Office
Cadillac Place
3058 West Grand Boulevard, Suite 2-300
Detroit, Michigan 48202-6058

Re: Violation Notice Dated October 15, 2015 [SRN: B2371, Wayne County] ("Notice")

Dear Mr. Lamb:

On October 19, 2015, we received your above-referenced Notice which the Department of Environmental Quality ("DEQ"), Air Quality Division ("AQD"), issued to PVS Technologies, Inc. ("PVS"), following the AQD's August 26, 2015 inspection of PVS's facility at 10825 Harper Avenue, Detroit, Michigan 48213 ("Facility"). Per your request, I'm writing in response to the items listed in your Notice.

AQD Notice Item No. 1—Exceeding Ferric Chloride Production Limits Allowed by Permit

"During the inspection, AQD staff observed the following . . .:

Process Description	Rule/Permit Condition Violated	Comments
Ferric Chloride	Wayne County Permit nos. C-9040	Facility exceeded the permit limit of
Production	through C-9055 and C-10082 through	52,600 tons of ferric chloride produced per
	C-10084 [collectively, 'Air Permits'];	year. Facility produced 53,403 tons in 2013
	Special Condition 21	and 54,858 tons in 2014.

* * *

... [A] review of production records showed a total of 53,403 tons and 54,858 tons of ferric chloride produced in 2013 and 2014, respectively. These totals exceed the permit limit of 52,600 tons of ferric chloride per year per, Special Condition 21."

PVS Response

PVS acknowledges that Special Condition 21 of PVS's Air Permits limits the Facility's ferric-chloride production to no more than 52,600 tons per year. PVS can't, however, explain why. As your records will

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reflect, our Permits have not been updated in over 20 years (since 1995), and we have no idea why Special Condition 21 was included in our Permits in the first place more than two decades ago. We suspect that there may have been some belief long ago that, simply by limiting the Facility's total production to that specific (and, we respectfully submit, arbitrary) annual amount, harmful emissions could somehow be avoided. To our knowledge, however, there is no scientific basis for such a belief (indeed, unless one sets the annual production limit at zero, there is always a risk of harmful emissions at any level of production). There is also no basis for believing that the Facility's emissions in 2013 (when it exceeded the 52,600-ton annual "limit" by only 1.5 %) or in 2014 (when it exceeded the 52,600-ton annual "limit" by only 4.3%) resulted in any excess harmful emissions whatsoever from our Facility.

A far more meaningful (and effective) means for preventing excessive harmful emissions is to "scrub" harmful elements from the Facility's emissions <u>regardless</u> of the quantity of product being produced by the Facility. For that reason, the Facility has, as you know, installed two scrubber systems—one that limits the Facility's hydrogen chloride emissions and one that limits the Facility's chlorine emissions. In addition to "scrubbing" the Facility's emissions, the chlorine scrubber employs a second means for reducing harmful emissions—it contains a "continuous emissions monitoring" (or "CEM") system which shuts down the entire production process if chlorine emissions ever reach 1 part per million (ppm), a chlorine emissions level that is <u>below</u> the chlorine emissions limit currently imposed by our Air Permits.

The key attribute of PVS's scrubber and CEM systems is that they work without regard to the quantity of product being produced. Again, as our records will consistently demonstrate, the quantities of product produced by our Facility have never had any bearing on the Facility's harmful emissions. For these reasons, on August 13, 2015 (two weeks <u>before</u> the AQD's 8/26/2015 inspection of the Facility), PVS submitted to the AQD a new permit application (PTI Appl. 152-15) which contained our proposal to increase the production limit at the Facility from 52,600 tons/year to 100,000 tons/year. In retrospect, given the lack of correlation between production quantities and emissions, we now wish to amend our pending application to eliminate the production limit from our Air Permits altogether.

In any event, for purposes of responding to your Notice, PVS submits that, because the Facility's recent *de minimis* exceedances of the arbitrary 52,600-ton annual production limit did not adversely affect air quality, those exceedances should properly be excused.

AQD Notice Item No. 2—Scrubbers Not Operating in Accordance with Permit Specifications

"During the inspection, AQD staff observed the following . . .:

Process Description	Rule/Permit Condition Violated	Comments
* * *	* * *	* * *
Ferric Chloride Production	Wayne County Permit nos. C-9040 through C-9055 and C-10082 through C-10084 [collectively, 'Air Permits']; Special Conditions 30, 34, and 35	Scrubbers not operating in accordance with permit specifications.

During the inspection on August 26, 2015, it was noted that the scrubbers were not operating within the parameters specified by the permit. Specifically, the single-stage scrubber was not equipped with a flow meter, as required by Special Condition 30; the two-stage scrubber was not using sodium hydroxide, as

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specified in Special Condition 34; and both scrubbers are rated higher than the maximum gas flow rate of 800 acfin, as allowed in Special Condition 35."

PVS Response

At the outset, PVS wishes to correct three factual inaccuracies in these statements:

- (1) PVS's single-stage scrubber is in fact equipped with a flow meter (FM127-1—see photographs contained in Attachment 1);
- (2) Each stage of PVS's two-stage scrubber is also equipped with a flow meter (FM501-1 on stage one and FM502-1 on stage two—see photographs contained in Attachment 2 and Attachment 3); and
- (3) PVS's two-stage scrubber does in fact use a sodium hydroxide scrubbing solution.

If you require further documentation of these facts, please let us know.

Regarding the last issue raised by your Notice (concerning our scrubbers' gas flow rate), please be advised that:

- (1) We acknowledge that, although our original Air Permits did not contain any restrictions regarding the gas flow rates of our scrubbers, Special Condition 35 was added to our Permits via a letter addendum from the AQD dated August 12, 1995. That Special Condition refers to a gas flow rate of "800 acfm," although it is not clear today which of our then-existing three scrubbers the gas flow rate pertained to. We are also unclear why this Special Condition was added at that time.
- (2) Today, 20+ years after Special Condition 35 was added to our Air Permits, none of the three scrubbers that were in place when the Special Condition was added still exists at the Facility. One of the original scrubbers (attached to our storage tanks) has been eliminated altogether as unnecessary, and the single-stage and dual stage scrubbers have been replaced with newer, more efficient models, each of which has a gas flow rate that exceeds the 800 acfm rate set back in 1995. Until recently, we were operating under the assumption that the individuals in charge of the Facility when these scrubbers were replaced had notified the AQD about these replacements; despite a diligent search, however, we have been unable to locate any documentation to that effect. It's possible that those in charge at the time reasonably believed that the replacement of this equipment was exempt from the permitting process under then-existing MDEO Rule 279 (now re-codified in Rules 285 (d) & (e)). Even if exempt, however, we clearly should have, in the interests of transparency, let you know that we had replaced the original scrubbers with newer improved equipment. As you will note from our August 13, 2015 permit application (PTI Appl. 152-15), which we filed two weeks before your recent inspection, we have sought to fix that oversight going forward. Fortunately, to the best of our knowledge, we do not believe that our administrative oversight in bringing this matter to your attention has had any adverse impact upon the air quality surrounding our Facility.

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Conclusion

I trust that this letter responds adequately to all of the matters raised in your Notice. Please be assured that PVS Technologies remains fully committed to its complete compliance with all applicable requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 P.A. 451, as amended (Act 451); and the Michigan Administrative Rules to Part 55 of Act 451. While we regret the technical violations that may have occurred due to our failure to keep our Air Permits up to date to reflect the newer improved equipment that we have installed, we believe that, once our Air Permits have been updated in accordance with our pending application, all violations will be completely eliminated going forward.

If you have any questions, please let me know (my contact information is listed below).

Sincerely,

Peter Onyskiw

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Attachments (3)

: Ms. LaReina Wheeler, City of Detroit, Dept. of Environmental Affairs

Mr. Shane Brunson, PVS Technologies, Inc. Mr. Matthew Hehn, PVS Chemicals, Inc. Mr. Steve Wasko, PVS Technologies, Inc. Mr. Andy Yaksic, PVS Technologies, Inc.

Attachment 1—Photographs of (1) Flow Meter FM127-1 and (2) Display— Installed on Single-Stage Reduction Scrubber





Attachment 2—Photographs of (1) Flow Meter FM501-1 and (2) Display— Installed on First Stage (Tower I) of Two-Stage Scrubber





Attachment 3—Photographs of (1) Flow Meter FM502-1 and (2) Display— Installed on Second Stage (Tower II) of Two-Stage Scrubber



