



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL**
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

Office of the
Secretary

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**NOTICE OF ADMINISTRATIVE PENALTY ASSESSMENT
AND SECRETARY'S ORDER**

Pursuant to 7 Del. C. §6005

Order No. 2018-A-0017

*PERSONALLY SERVED BY AN ENVIRONMENTAL
PROTECTION OFFICER*

Issued To:

Rohm and Haas Electronic Materials CMP Inc.
Attn: Mr. William Schulz
Newark Site Leader
451 Bellevue Road
Newark, DE 19713

Registered Agent:

The Corporation Trust Company
Corporation Trust Center
1209 Orange Street
Wilmington, DE 19801

This Assessment and Order serves to notify Rohm and Haas Electronic Materials, CMP, Inc. ("Respondent") that the Secretary of the Department of Natural Resources and Environmental Control ("Department") has found Respondent in violation of its air quality permit. Accordingly, the Department is issuing this Notice of Administrative Penalty Assessment and Secretary's Order pursuant to 7 Del. C. §6005(b)(3).

BACKGROUND

Rohm and Haas Electronic Materials CMP Inc. (Rohm & Haas) has a facility located on 451 Bellevue Road in Newark, Delaware. The Dow Chemical Company acquired Rohm and Haas in 2009; however, Rohm and Haas Electronic Materials CMP, Inc. ("Respondent") continues to be the legal entity with an air quality permit for the facility.

The facility specializes in research and development and production of polishing pads and slurries used for chemical mechanical polishing (“CMP”) of materials used to produce integrated circuits and electronic substrates. Emission units at the site include the Building 2 SUBA line 1 and SUBA line 2 for the production of polishing pad material in addition to the Polymer Area for the preparation of polyurethane dispersions for use on the SUBA lines; the Building 3 IMPR2 process; the Building 5 Urethane polishing pad manufacturing process; the Building 5 Air Classification system; the Building 15 Air Classification System; two (2) Building 5 Dimethylformamide (“DMF”) degreasers and several storage tanks that contain DMF and DMF/water mixtures. Emissions from Suba lines 1 and 2 (emission units 2-1 and 2-2), the Poromerics Pilot Line (emission unit 2-8) and the Building 2 Polymer Area (emission unit 2-9) are controlled via the scrubber.

Rohm & Haas has potential emissions of Dimethylformamide (“DMF”), a hazardous air pollutant (“HAP”), of greater than 10 tons per year (“TPY”) and potential emissions of Volatile Organic Compounds (“VOCs”) and nitrogen oxides (“NO_x”) greater than 25 TPY. It is because of this that Respondent is subject to 7 DE Admin. Code 1130, also known as the Title V State Operating Permit Program. Respondent’s operations at the facility have been governed by a Title V permit since 2001. At the time of the test, the facility was operating under its second Title V permit renewal, **Permit: AQM-003/00033-Renewal (2)** issued March 30, 2011 (“TV Permit R2”). The permit expired December 31, 2015. However, Respondent submitted a timely renewal application and until the next renewal permit is issued, Respondent continues to operate under the governance of TV Permit R2.

A condition of Respondent’s TV Permit R2 requires that at least once during the term of the permit, it conduct performance tests on its emission units to demonstrate compliance with emission and destruction efficiency limits set forth within the permit. Respondent timely conducted said performance testing of the scrubber on March 25, 2015. However, during the first two test runs, it was observed that the scrubber was emitting DMF in excess of the permitted 2.0 lbs/hr limit. Run 1 resulted in DMF emissions of 6.19 lbs/hr and Run 2 resulted in DMF emissions of 6.26 lbs/hr. In addition, the DMF removal/destruction efficiency was below the minimum 98.2% required by the permit. The DMF removal/destruction efficiencies were 76.45% for Run 1 and 79.64% for Run 2. Testing was discontinued and a thorough cleaning of the scrubber was performed on March 26, 2015. It was found to have a significant amount of sediment and biological growth that was impacting the performance of the scrubber. Following completion of the cleaning, three additional tests were completed that same day, which showed compliance with the DMF limits. A Notice of Violation (“NOV”) dated September 8, 2015, was issued to Respondent on September 21, 2015, for the failed performance testing.

FINDINGS OF FACT

1. Equipment at Respondent's Facility has the potential to emit HAPs, VOCs and NO_x in quantities that subject it to the Title V State Operating Permit Program and operation of said equipment is currently governed by a Title V permit, **Permit: AQM-003/00033-Renewal (2)** ("TV Permit R2") issued on March 30, 2011.
2. Pursuant to TV Permit R2, performance testing of certain emission units is required to be conducted at least once during the term of the permit to demonstrate compliance with their respective permitted limits.
3. Respondent conducted the performance testing on March 25, 2015, where after the first two runs, it was observed that DMF emissions from the scrubber were in excess of permitted limits and the DMF destruction/removal efficiency was below permit requirements.
4. Testing was discontinued and a thorough cleaning of the scrubber occurred on March 26, 2015, where it was found to have a significant amount of sediment and biological growth.
5. Following completion of the cleaning, testing resumed that same day, and after three additional tests, the scrubber was found to be in compliance.
6. A Notice of Violation dated September 8, 2015, was issued to Respondent on September 21, 2015, for the violations associated with the failed performance testing.

PERMIT PROVISIONS

1. Condition 3 – Table 1(a)(1)(ii) of **Permit: AQM-003/00033-Renewal (2)** states:
"Emission Units 2-1, 2-2, 2-8, and 2-9 SUBA Lines 1 and 2, Poromerics Pilot Line, and Building 2 Polymer Area with Associated Scrubber: Volatile Organic Compounds (VOC's): VOC emission levels shall not exceed the following: Including fugitives, air contaminant emissions from SUBA Line 1, SUBA Line 2, the Poromerics Pilot Line, the Polymer Area, and all associated equipment, combined, shall not exceed 2.0 pounds per hour and 8.9 tons per year, 12 month rolling basis, of dimethylformamide (DMF)."
2. Condition 3 – Table 1(a)(5)(ii) of **Permit: AQM-003/00033-Renewal (2)** states:
"Compliance Assurance Monitoring (CAM) Plan: Scrubber for VOC Control Emission Limitation: VOC emission levels shall not exceed the following: Including fugitives, air contaminant emissions from SUBA Line 1, SUBA Line 2, the Poromerics Pilot Line, and the Polymer Area, combined, shall not exceed 2.0 pounds per hour and 8.9 tons per year, 12 month rolling basis, of dimethylformamide (DMF)."

3. Condition 3 – Table 1(a)(2)(iii)(B) of **Permit: AQM-003/00033-Renewal (2)** states:

“Emission Units 2-1, 2-2, 2-8, and 2-9 SUBA Lines 1 and 2, Poromerics Pilot Line, and Building 2 Polymer Area with Associated Scrubber: Streamlined Condition: Operational Standard: The owner or operator shall operate the packed bed scrubber handling emissions from SUBA Line 1, SUBA Line 2, the Polymer Area, and the Poromerics Pilot Line at its highest achievable efficiency, of at least 98.2%, whenever VOCs are in any of the equipment ducted to the scrubber, except during times when production is halted and induced flow to the scrubber is deactivated to perform maintenance on the scrubber or when a power outage occurs.”

CONCLUSION

Based on the above, the Department has concluded that Respondent committed the following violations:

1. Respondent violated Condition 3 – Table 1(a)(1)(ii) and Condition 3 – Table 1(a)(5)(ii) of **Permit: AQM-003/00033-Renewal (2)** when stack testing Runs 1 and 2 conducted on Building 2 Packed Bed Scrubber associated with Emission Units 2-1, 2-2, 2-8, and 2-9 SUBA Lines 1 and 2, Poromerics Pilot Line, and Building 2 Polymer Area on March 25, 2015, showed DMF emissions of 6.19 lbs/hr and 6.26 lbs/hr, respectively.
2. Respondent violated Condition 3 – Table 1(a)(2)(iii)(B) of **Permit: AQM-003/00033-Renewal (2)** when stack testing Runs 1 and 2 conducted on Building 2 Packed Bed Scrubber associated with Emission Units 2-1, 2-2, 2-8, and 2-9 SUBA Lines 1 and 2, Poromerics Pilot Line, and Building 2 Polymer Area on March 25, 2015, showed DMF removal efficiencies of 76.45% and 79.64% respectively.

ASSESSMENT OF PENALTY AND COSTS

Pursuant to the provisions of 7 *Del. C.* §6005(b)(3), this is written notice to Respondent that on the basis of its findings, the Department is assessing Respondent an administrative penalty of \$10,000 for the violations identified in this Assessment and Order.

In addition to the penalty assessment, Respondent is hereby assessed costs in the amount of \$5,110.15 pursuant to 7 *Del. C.* §6005(c), which were incurred by the Department in the investigation and abatement of the noted violations.

Respondent shall submit one check to the Department in the amount of \$10,000 to pay the penalty and one check in the amount of \$5,110.15, to pay the Department's costs within 30 days from the receipt of this Assessment and Order. The check(s) shall be made payable to the “State of Delaware” and shall be directed to: Valerie S. Edge, Deputy Attorney General, Department of Justice, Environmental Unit, 102 W. Water Street-3rd Floor, Dover, Delaware 19904.

The Department reserves the right to take additional enforcement actions regarding these and other violations by Respondent, including but not limited to one or more of the following: an action under the authority vested in the Secretary by 7 Del. C. Chapter 60 and 7 DE Admin. Code 1100 to revoke Respondent's air quality permit(s) for the State of Delaware, an action under 7 Del. C. §6005(b)(1) seeking penalties for past violations, an action under 7 Del. C. §6005(b)(2) seeking penalties for continuing violations, an action in the Court of Chancery pursuant to 7 Del. C. §6005(b)(2) seeking a temporary restraining order or an injunction, and the imposition of civil penalties and recovery of the Department's costs and attorney's fees pursuant to 7 Del. C. §§6005(b)(3) & (c)(1).

PUBLIC HEARING AND APPEAL RIGHTS

This Assessment and Order is effective and final upon receipt by Respondent. Pursuant to 7 Del. C. §6008, any person whose interest is substantially affected by this action of the Secretary may appeal to the Environmental Appeals Board within 20 days of the receipt of the Assessment and Order. In the alternative, Respondent may, pursuant to 7 Del. C. §6005(b)(3), request a public hearing on the penalty assessment and Order, within 30 days of receipt of the Assessment and Order. A hearing would be conducted pursuant to 7 Del. C. §6006, and the Secretary's Order following the hearing would be subject to appeal, pursuant to 7 Del. C. §6008, by any person substantially affected.

To submit an appeal to the Environmental Appeals Board, there is a \$50.00 filing fee, with a check made payable to the: "Environmental Appeals Board" and sent to:

Department of Natural Resources and Environmental Control
Office of the Secretary
Attn: Assistant to the Environmental Appeals Board
89 Kings Highway
Dover, DE 19901
Phone: (302) 739-9000

If you want a hearing and opportunity to contest this Assessment and Order, you must submit your request, in writing, within 30 days of receipt of this Assessment and Order to:

Department of Natural Resources and Environmental Control
Office of the Secretary
89 Kings Highway
Dover, DE 19901
Phone: (302) 739-9000

Respondent may waive its right to request a hearing or to file an appeal by signing the waiver attached herein and prepaying the penalty. If no hearing is requested or appeal filed as described above and the administrative penalty of \$10,000 and costs in the amount of \$5,110.15 are not paid within the time frame above, DNREC may immediately take action to collect the above amounts.

If you have any questions, please contact Angela Marconi at (302) 323-4542.

Date 3/5/18


Shawn M. Garvin, Secretary
Department of Natural Resources
and Environmental Control

cc: Valerie S. Edge, Deputy Attorney General
Ali Mirzakhali, P.E., Director
Angela Marconi, P.E., BCEE, Program Manager
Joanna French, P.E. Managing Engineer
Dawn Minor, Paralegal
Susan Baker, Enforcement Coordinator

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WAIVER OF STATUTORY RIGHT TO A HEARING

Rohm & Haas Electronic Materials CMP, Inc. hereby waives its right to a hearing and its opportunity to appeal or contest this Assessment and Order and agrees to the following:

1. **Rohm & Haas Electronic Materials CMP, Inc.** will pay the administrative penalty in the amount of \$10,000 by sending a check payable to the "State of Delaware" within 30 days of receipt of this Assessment and Order. The check shall be directed to Valerie S. Edge, Deputy Attorney General, Department of Justice, 102 W. Water Street-3rd Floor, Dover, DE 19904; and
2. **Rohm & Haas Electronic Materials CMP, Inc.** will reimburse the Department in the amount of \$5,110.15, which represents the Department's estimated costs. The reimbursement shall be paid within 30 days of receipt of this Assessment and Order. The separate check shall be made payable to the "State of Delaware" and be directed to Valerie S. Edge, Deputy Attorney General, Department of Justice, 102 W. Water Street-3rd Floor, Dover, DE 19904.

Rohm & Haas Electronic Materials CMP, Inc.

Date: _____

By: _____

Title: _____

