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| _____              | ] | <b>RACT ORDER</b>    |
| Diacom Corporation | ] | <b>June 28, 2017</b> |
| 5 Howe Drive       | ] | <b>RO-0002</b>       |
| Amherst, NH 03031  | ] |                      |
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**A. Introduction**

This RACT Order is issued by the New Hampshire Department of Environmental Services, Air Resources Division, to Diacom Corporation, pursuant to RSA 125-C.

**B. Parties**

1. The New Hampshire Department of Environmental Services, Air Resources Division (NHDES), is a duly constituted administrative agency of the State of New Hampshire having its principal offices at 29 Hazen Drive, Concord, NH 03302, telephone number (603) 271-1370.
2. Diacom Corporation (Diacom) is a New Hampshire corporation having a principle office address of 5 Howe Drive, Amherst, NH 03031, telephone number (603) 880-1900.

**C. Statements of Fact and Law**

1. Diacom owns and operates a facility that produces molded diaphragms for various industries including automotive, aerospace, medical instrumentation, and food and water processing applications at 5 Howe Drive in Amherst, New Hampshire (the Facility). The manufacturing process involves bonding industrial fabrics and custom engineered elastomers (rubber) to produce a variety of molded parts.
2. Effective June 1, 2011, NHDES readopted the New Hampshire Code of Administrative Rules Env-A 1200, *Volatile Organic Compounds (VOCs) Reasonably Available Control Technology (RACT)* with amendments.
3. Env-A 1220 established VOC content limits for miscellaneous industrial adhesives and adhesive primer application processes. On and after January 1, 2016, a source whose adhesive application processes have combined actual emission, before controls, during any consecutive 12-month period which equal or exceed 3 tons of VOCs shall be subject to Env-A 1220.
4. Actual emissions of VOCs at the Facility are greater than 3 tons per consecutive 12-month period and, therefore, Diacom became subject to Env-A 1220 on January 1, 2016.
5. Diacom uses adhesives to bond fabric to rubber which is not covered under Table 1220-1, *VOC Content Limits for Adhesive and Adhesive Primer Application Processes*.
6. On November 28, 2016, Diacom submitted an application for a RACT Order requesting source-specific VOC coating limits be established for the adhesive process. The application contained a technical justification for the use of high-solvent based adhesive that is necessary to obtain a monomolecular layer of adhesive to the fabric.
7. Diacom evaluated the use of an add-on Recuperative Catalytic Oxidizer (RCO) as a technically feasible option for control of VOCs. Diacom concluded that the RCO would be economically infeasible.

8. Diacom evaluated the use of a cryo-condensation system with distillation to recover VOC emissions. Diacom concluded that this system would be economically infeasible.
9. Diacom proposed a VOC RACT limit of 7.4 lb VOC/gal coating, excluding water and exempt compounds, as applied. This limit was determined by evaluating all the current adhesives used in the process and adding 5% to the highest VOC content.
10. Diacom agreed to limit total VOC emissions from the adhesive application process to 15 tons during any consecutive 12-month period.

#### **D. Order**

Based on the statements of fact and law, NHDES hereby orders Diacom, effective upon issuance of this RACT Order, to comply with the following requirements as RACT:

1. Diacom shall limit total VOC emissions from the adhesive application process to less than 15 tons during any consecutive 12-month period.
2. Diacom shall control VOC emissions by using adhesives that meet a limit of 7.4 pounds of VOC per gallon coating (lb VOC/gal), as applied, excluding water and exempt compounds.
3. In accordance with the provisions of Env-A 1220.04, *Application Methods*, Diacom shall use one or more of the following control techniques for all adhesive application operations at the Facility:
  - a. Electrostatic spray;
  - b. High Velocity Low Pressure (HVLP) spray;
  - c. Flow coat, roll coat, or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;
  - d. Dip coat, including electrodeposition;
  - e. Airless spray;
  - f. Air-assisted airless spray; or
  - g. Other adhesive application methods capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying.
4. In accordance with Env-A 1220.05, *Work Practices for Waste Materials*, Diacom shall implement the following work practices for adhesives, thinners and adhesive-related waste materials at the Facility:
  - a. Store all VOC-containing adhesives, adhesive primers, and process-related waste materials in closed containers;
  - b. Ensure that mixing and storage containers used for VOC-containing adhesives, adhesive primers, and process-related waste materials are kept closed at all times except when depositing or removing these materials;
  - c. Minimize spills of VOC-containing adhesives, adhesive primers, and process-related waste materials; and
  - d. Convey VOC-containing adhesives, adhesive primers, and process-related waste materials from one location to another in closed containers or pipes.

5. In accordance with Env-A 1220.06, *Work Practices for Cleaning Materials*, Diacom shall implement the following work practices for cleaning materials used for surface preparation or for application equipment cleaning at the Facility:
  - a. Store all VOC-containing cleaning materials and used shop towels in closed containers;
  - b. Ensure that storage containers used for VOC-containing cleaning materials are kept closed at all times except when depositing or removing these materials;
  - c. Minimize spills of VOC-containing cleaning materials;
  - d. Convey VOC-containing cleaning materials from one location to another in closed containers or pipes; and
  - e. Minimize VOC emissions from the cleaning or application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and that all spent solvent is captured in closed containers.
6. Recordkeeping and Reporting Requirements
  - a. Diacom shall maintain the following monthly records for adhesives, thinners and cleaners which contain VOCs. This information, along with the VOC content records required in 6.b. below, shall be used to calculate the monthly VOC emissions from the process.
    - (i) Total quantity of raw materials used in the process; and
    - (ii) Total quantity of waste materials shipped off-site.
  - b. All coatings used at the Facility after the issuance of this RACT order shall be either tested using the methods listed in items (i) and (ii), below, or Diacom will retain sufficient records for prima facie evidence in support of demonstrating compliance with the VOC RACT limit.
    - (i) Method 24, 40 CFR Part 60, Appendix A at 1-hour bake time, or an alternative test method approved by the Director and EPA; or
    - (ii) Method 24A, 40 CFR Part 60, Appendix A, or an alternative test method approved by the Director and EPA.
    - (iii) Prima facie evidence shall include all of the information required by the VOC data sheet found on either page II-2 or III-2, as applicable, of EPA document EPA-450/3-84-019, *Procedures for Certifying Quantity of Volatile Organic Compounds Emitted by Paint, Ink, and Other Coatings*, dated 1984.

If there is a discrepancy between the formulation data and the results of the Method 24 or 24A analysis, compliance shall be based on the results from the Method 24 or 24A analysis.

  - c. Maintain records in accordance with Env-A 904, *VOC Emission Statements Recordkeeping Requirements*, and submit reports in accordance with Env-A 908, *VOC Emission Statements Reporting Requirements*.
  - d. As part of the Annual Emissions Report submitted annually by April 15<sup>th</sup> of the following year, include information detailing efforts taken to find adhesives with lower VOC contents. The report shall contain the following information:
    - (i) A technical evaluation of each alternative adhesive considered and the basis for acceptance or rejection; or

- (ii) A statement indicating that no adhesives were evaluated during the time period covered by the report.

Please address any correspondence and communication in reference to this Order to the following:

Operating Permits Program Manager  
NHDES, Air Resources Division  
Permitting and Environmental Health Bureau  
29 Hazen Drive  
P.O. Box 95  
Concord, NH 03302-0095  
(603) 271-6796



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Craig A. Wright  
Director  
Air Resources Division

cc: Timothy Drew, PIP Office  
David Conroy, USEPA  
Town of Amherst