

24 June 2009

Mr. Thomas A. DiNunzio
Engineering Manager
DeWAL Industries, Inc.
15 Ray Trainor Drive
P.O. Box 372
Saunderstown, RI 02874

Dear Mr. DiNunzio:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your application for the installation of a recuperative thermal oxidizer at your 15 Ray Trainor Drive facility in Saunderstown, RI.

The Catalytic Products Quadrant SR-12, 12,000 scfm recuperative thermal oxidizer (Approval No. 2060) will replace the Langbein & Engelbracht 7,000 scfm recuperative thermal oxidizer (Approval No. 1866) and will treat VOC emissions from the drying ovens of coating lines P001 and P002.

Enclosed is a minor source permit issued pursuant to our review of your application.

These changes will be incorporated into your operating permit as a minor modification following completion of the required emissions testing. During the time from the date of issuance of this permit and the revision of your operating permit, DeWAL Industries, Inc. must comply with the terms and conditions in this minor source permit and need not comply with the terms and conditions in the current operating permit that would be modified as a result of these changes. However, if DeWAL Industries, Inc. fails to comply with the terms and conditions in this minor source permit during this time period, the existing permit terms and conditions that would be modified may be enforced against you.

Should you have any questions concerning this permit, I can be reached at 222-2808, extension 7028.

Sincerely,

Aleida M. Whitney
Air Quality Specialist
Office of Air Resources

cc: Saunderstown Building Official

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

DeWAL INDUSTRIES, INC.

APPROVAL NO. 2060

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

DeWAL Industries, Inc.

For the following:

Installation of a Catalytic Products Quadrant SR-12. 12,000 scfm regenerative thermal oxidizer

(Approval No. XXXX). The Catalytic Products oxidizer will replace the Langbein & Engelbracht

7,000 scfm recuperative thermal oxidizer (Approval No. 1866) and will treat VOC emissions from

the drying ovens of coating lines P001 and P002.

Located At:

15 Ray Trainor Drive, Saunderstown

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *DeWAL Industries, Inc.* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

Douglas L. McVay, Acting Chief
Office of Air Resources

Date of issuance

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES**

Permit Conditions and Emission Limitations

DeWAL INDUSTRIES, INC.

Approval No. 2060

A. Emission Limitations:

1. All VOC emissions generated from the drying ovens of Coating Lines No. 1 and No. 2 shall be captured and contained for discharge to the recuperative thermal oxidizer.
2. Emissions from Coating Lines No. 1 and No. 2 shall not exceed 4.79 lbs VOC/gallon of solids.
3. Compliance with the emission limitation in Condition A.2 shall be achieved with the regenerative thermal oxidizer (Approval No. 1546) and the recuperative thermal oxidizer (Approval No. 2060). VOC emissions generated from the drying ovens of Coating Lines No. 1 and No. 2, shall be reduced by 97% or greater. This is to be achieved through a combination of 100% capture of the VOC generated by the drying ovens of Coating Lines No. 1 and No. 2 and 97% destruction of this VOC.
4. The destruction efficiency of the recuperative thermal oxidizer for VOC shall be at least 97%.
5. The total quantity of VOC emissions discharged to the thermal oxidizer from the drying ovens of Coating Lines No. 1 and No. 2 shall not exceed 200 lbs. per hour.
6. The total quantity of VOC emissions discharged to the atmosphere from Coating Lines No. 1, No. 2, No. 3, the mixing room operations, the PTFE coating line and the PTFE extrusion line shall not exceed 4,270 lbs per month (12-month rolling average).
7. When producing pressure sensitive tape and label materials, the amount of VOC input into Coating Line No. 2 shall not exceed 45 Mg (50 tons) in any consecutive 12-month period.

B. Operating Requirements

1. The operating temperature of the recuperative thermal oxidizer shall be maintained at or above 1400°F whenever VOC is being discharged to the oxidizer. This minimum temperature may be revised based on the results of emission testing.
2. Coating Lines No. 1 and No. 2 shall each be equipped with an interlock to prevent operation of the coating equipment if the operating temperature of the thermal oxidizer is less than the temperature specified in Condition B.1.
3. To ensure 100 percent capture of the VOC generated, Coating Lines No. 1 and No. 2 must be located within a total enclosure. This total enclosure must meet criteria for a permanent total enclosure in 40 CFR 51, Appendix M, Method 204 – “Criteria For and Verification of a Permanent or Temporary Total Enclosure”.
4. All access doors and windows in each room that contains Coating Lines No. 1 and No. 2 shall be closed during routine operation of the coating equipment. Brief, occasional openings of doors to allow for entering and exiting the coating room is acceptable.
5. Air passing through any opening in the coating room for Coating Lines No. 1 and No. 2 shall flow into the room continuously.
6. The total volume of air discharged to the thermal oxidizer from the drying ovens of Coating Lines No. 1 and No. 2 shall not exceed 12,000 scfm, the design capacity of the thermal oxidizer.
7. The recuperative thermal oxidizer shall be operated according to its design specifications whenever Coating Lines No. 1 and/or No. 2 are in operation or are emitting air contaminants.

C. Continuous Monitoring

1. The operating temperature of the recuperative thermal oxidizer shall be continuously monitored, indicated and recorded. The equipment to continuously monitor the operating temperature of the oxidizer must have an accuracy of +/-1 percent of the temperature being monitored in degrees Celsius or +/-1 degree Celsius, whichever is greater.

The equipment to continuously monitor the operating temperature of the oxidizer must be calibrated and maintained according to the manufacturer’s specifications. The calibration of the chart recorder, data logger or temperature indicator must be verified once per year or the chart recorder, data logger or temperature indicator must be replaced.

2. The static pressure within the permanent total enclosures for Coating Lines No. 1 and No. 2 shall be continuously monitored.
3. Each permanent total enclosure shall be inspected semi-annually and should include all the items required to demonstrate that the permanent total enclosure criteria as established in 40 CFR 51, Appendix M, and Method 204 "Criteria for Verification of a Permanent or Temporary Total Enclosure" are maintained.

D. Emissions Testing

1. Within 180 days of the issuance of this minor source permit, performance testing shall be conducted to demonstrate compliance with all applicable emission limitations.
2. An emissions testing protocol shall be submitted to the Office of Air Resources for review at least 60 days prior to the performance of any emissions test. The owner/operator shall provide the Office of Air Resources at least 60 days prior notice of any emissions test.
3. All test procedures used for emissions testing shall be approved by the Office of Air Resources prior to the performance of any emissions test.
4. The control efficiency of the recuperative thermal oxidizer will be determined using USEPA Reference Method 25 or other methods approved by the Director and USEPA. Continuous compliance will be maintained at all times. Compliance averaging times will be three hours. Once the control efficiency has been determined by Reference Method 25 or any alternative method approved by the Office of Air Resources and USEPA, compliance shall be determined on an instantaneous basis time period (e.g. determined control efficiency shall be used to calculate whether samples from the process meet the applicable emissions limit.)
5. The owner/operator shall install any and all test ports or platforms necessary to conduct the required emissions testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment.
6. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitations or air quality standards.
7. A final report of the results of emission testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing.
8. All emissions testing must be observed by the Office of Resources or its authorized representatives to be considered acceptable, unless the Office of Air Resources provides authorization to the owner/operator to conduct the testing without an

observer present.

E. Record Keeping and Reporting

1. The owner/operator shall collect, record and maintain all of the following information each month for Coating Lines No. 1 and No. 2, as well as for the recuperative thermal oxidizer:
 - a. The name and identification number of each coating used on each coating line;
 - b. The mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating used each month on each coating line;
 - c. The type and amount of solvent used for diluents and clean up operations;
 - d. A log of operating time for the capture system, recuperative thermal oxidizer, monitoring equipment, and the associated coating lines or operation;
 - e. A maintenance log for the capture system, thermal oxidizer, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages;
 - f. The operating temperature of the thermal oxidizer; and
 - g. All 3-hour periods of operation in which the operating temperature of the thermal oxidizer was more than 28°C (50°F) below the average operating temperature during the most recent performance test that demonstrated that the facility was in compliance.
2. The owner/operator shall record the static pressure within each permanent total enclosure once per day and the date, time and measurement shall be recorded unless the process is shut down.
3. Deviations from permit conditions, including those attributable to upset conditions as defined in this permit, shall be reported, in writing, within five (5) business days of the deviation, to the Office of Air Resources. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.
4. The owner/operator shall notify the Office of Air Resources of any record showing noncompliance with the terms of this permit or any other air pollution control rule or regulation applicable to Coating Lines No. 1 and No. 2 by sending a copy of the record to the Office of Air Resources within 30 days following the occurrence.

5. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
6. The owner/operator shall notify the Office of Air Resources in writing of the date of actual start-up of the Catalytic Products recuperative thermal oxidizer, no later than 15 days after such date.
7. The owner/operator shall maintain a record of all measurements, performance evaluations, calibration checks and maintenance or adjustments for each continuous monitor.
8. The owner/operator shall notify the Office of Air Resources in writing, of any planned physical or operational change to any equipment that would:
 - a. Change the representation of the facility in the permit application
 - b. Alter the applicability of any state or federal air pollution rules or regulations
 - c. Result in the violation of any terms or conditions of the permit
 - d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any change that may result in an increased emission rate of any air contaminant shall have the prior approval of the Director.

9. The owner/operator shall collect and record the following information for Coating Line No. 2 when manufacturing pressure sensitive tape and label materials:
 - a. Maintain a 12-month record of the amount of VOC input to the coating process.
10. The owner/operator shall record the date of the inspection of each permanent total enclosure and maintain the check list that is used to verify PTE configuration and maintenance status and exhaust system conditions.

11. The owner/operator shall notify the Office of Air Resources of all 3-hour periods of operation in which the operating temperature of the thermal oxidizer was more than 28°C (50°F) below the average operating temperature during the most recent performance test that demonstrated that the facility was in compliance. This notification shall be provided in the semi-annual monitoring report required in Condition II.AA.2 of Operating Permit No. RI-16-06.
12. The owner/operator shall notify the Office of Air Resources whenever the static pressure within a permanent total enclosure is less than -0.007 inches of water at any time. This notification shall be provided in the semi-annual monitoring report required in Condition II.AA.2 of Operating Permit No. RI-16-06.
13. The permittee, before changing the method of compliance from control devices to daily-weighted averaging or complying coatings, shall submit a Compliance Certification Plan to the Office of Air Resources for review and approval. Such plan shall include:
 - a. The name and location of the facility;
 - b. The name, address and telephone number of the person responsible for the facility;
 - c. The name and identification number of the emission units which will comply by means of daily weighted averaging or complying coatings;
 - d. For daily-weighted averaging:
 - (1) The instrument or method by which the permittee will accurately measure or calculate the volume of each coating (excluding water), as applied, used each day on each emission unit;
 - (2) The method by which the permittee will create and maintain records each day as required by Subsection 19.5.2(c) of APC Regulation No. 19;
 - (3) The time at which the facility's day begins if a time other than midnight local time is used to define a day.
 - e. For complying coatings:
 - (1) The name and identification number of each coating, as applied, on each coating line or operation;

- (2) The mass of VOC per volume coating (excluding water) and the volume of each coating (excluding water), as applied;
 - (3) The time at which the facility's day begins if a time other than midnight local time is used to define a day.
 - f. Information describing the effect of the change on the emissions of any air contaminant.
 - g. A demonstration that emissions from the stationary source will not cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by APC Regulation No. 22.
14. All records required in this permit shall be maintained for a minimum of 5 years after the date of each record and shall be available to representatives of the Office of Air Resources upon request.

F. Other Permit Conditions

1. To the extent consistent with the requirements of this permit and applicable federal and state laws, the equipment shall be designed, constructed and operated in accordance with the representation of the equipment in the permit application dated 6 February 2009.
2. The owner/operator shall shut down Coating Lines No. 1 and No. 2 in the event of a malfunction of the emission capture system and/or recuperative thermal oxidizer that results in or that could result in, emissions in excess of the permit limits. The coating equipment shall remain shut down until the malfunction has been identified and corrected.
3. There shall be no by passing of the recuperative thermal oxidizer during times when VOC is being discharged to the control device.
4. Approval No. 1866 issued for the installation of the Langbein & Engelbracht 7,000 scfm thermal oxidizer is revoked. This revocation will become effective upon startup of the Catalytic Products Quadrant SR-12 thermal oxidizer.
5. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
6. Coating Line No. 2 is subject to the requirements of Title 40 of the Code of Federal Regulations, Part 60 (40 CFR 60), Subparts A (General Provisions) and

RR (Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations). If there is any conflict between any term or condition of this permit and the applicable provisions of any of these subparts, the owner/operator shall comply with the term or condition of this permit.

7. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

G. Malfunctions

1. Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of any air pollution control system, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of an air pollution control system is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to operate the source on which it is installed at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following:
 - a. Identification of the specific air pollution control system and source on which it is installed;
 - b. The expected period of time that the air pollution control system will be malfunctioning or out of service;
 - c. The nature and quantity of air contaminants likely to be emitted during said period;
 - d. Measures that will be taken to minimize the length of said period;
 - e. The reasons that it would be impossible or impractical to cease the source operation during said period.
2. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:

- a. The malfunction was not attributable to improperly designed air pollution control equipment, lack of preventative maintenance, careless or improper operation, or operator error;
- b. The malfunction was not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- c. Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.
- d. All possible steps were taken to minimize emissions during the period of time that the repairs were performed.
- e. Emissions during the period of time that the repairs were performed will not:
 - (1) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and
 - (2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
- f. The reasons that it would be impossible or impractical to cease the source operation during said period.
- g. The owner/operator's action in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.