

**STATE OF VERMONT
AGENCY OF NATURAL RESOURCES**

IN THE MATTER OF: U.S. Samica Corporation
Windcrest Road
Rutland, Vermont

APPLICABLE REGULATION: Section 5-253.20 of the *Air Pollution Control Regulations*

ADMINISTRATIVE ORDER

Having found that U.S. Samica is subject to Section 5-253.20 of the *Air Pollution Control Regulations (Regulations)*, the Secretary (Secretary) of the Agency of Natural Resources (Agency), pursuant to the authority set forth in 10 V.S.A. Section 554(4), hereby issues the following Administrative Order:

STATEMENT OF FACTS

1. On August 13, 1993, the *Regulations* were amended to include Section 5-253.20 (Other Sources That Emit Volatile Organic Compounds). Section 5-253.20 provides for the application of reasonably available control technology (RACT) on stationary sources of volatile organic compounds (VOCs) not otherwise regulated by a VOC standard. Any such stationary source having allowable VOC emissions of 50 tons per year or more is required to:
 - (a) install and operate emission capture and control techniques or use complying coatings to achieve an overall reduction in uncontrolled VOC emissions of at least 81 weight percent;
 - (b) for coating units, limit daily weighted average VOC content to 3.5 pounds of VOC per gallon or less of coating as applied (excluding water and exempt compounds), or;
 - (c) comply with an alternative control plan.

Alternative control plans were required to be submitted and approved by the Agency by November 15, 1993.
2. At its Windcrest Road facility, U.S. Samica Corporation operates three process lines which manufacture electrically insulating paper. This paper is produced by binding mica particles together using resins with fiberglass or polyester cloth. Organic solvents are used as a carrier for the resin solids and are volatilized to the atmosphere in the dryers.

The three process lines are identified as follows: Wolverine, Midland-Ross, and Phase II. The Wolverine line is equipped with an incineration control device installed in 1980. Based on the potential production rates of the three process lines, allowable emissions of VOCs from the Windcrest Road facility are in excess of 50 tons per year. Consequently, U.S. Samica Corporation is subject to the requirements of Section 5-253.20 of the *Regulations*.

3. U.S. Samica Corporation submitted an alternative control plan on October 19, 1993. The alternative control plan proposed to investigate simultaneously several VOC reduction strategies, including reformulation to lower VOC containing resins, shifting products to the controlled Wolverine process line, and an incineration unit for the Phase II and Midland-Ross process lines.
4. On December 1, 1993 the Agency provided U.S. Samica Corporation with comments on the October 19, 1993 alternative control plan submittal and met with representatives of U.S. Samica Corporation on December 3, 1993. On January 11, 1994, the Agency notified U.S. Samica Corporation that its process lines were not considered "coating lines", therefore the 3.5 pounds of VOC per gallon standard specified in 5-253.20(b)(2) of the *Regulations* for coating lines was not applicable to the U.S. Samica process lines and was no longer a compliance option under the alternative control plan. The Agency informed U.S. Samica that in order to comply with Section 5-253.20 of the *Regulations*, it must achieve the equivalent of an 81% reduction in uncontrolled VOC emissions on a daily basis from each of their processing lines and that the only viable option was the installation of a capture and control system on the uncontrolled process lines.
5. On January 26, 1994 U.S. Samica submitted a revised alternative control plan and compliance schedule in which they proposed to achieve an 81% reduction in uncontrolled VOC emissions by installing and operating an incineration control device on the Midland-Ross line and possibly directing Phase II products to the Wolverine line or discontinuing its operation. In order to achieve an overall 81% by weight reduction in uncontrolled VOC emissions, U.S. Samica proposed a capture system capable of 95% capture of the VOC emissions and 95% destruction of those emissions. U.S. Samica would continue to utilize the existing incineration control device on the Wolverine line to comply with the minimum required 81% overall control efficiency. U.S. Samica proposed to achieve compliance by May 31, 1995.

ORDER

Upon the receipt of this Administrative Order, U.S. Samica Corporation shall comply with the following conditions:

- (1) U.S. Samica Corporation shall continue to operate and maintain an emissions capture and incineration control device on the Wolverine line and shall by May 31, 1995 install, operate, and maintain an emissions capture and incineration control device on the Midland-Ross line. The emissions capture and incineration control devices shall be utilized at all times when the above referenced process lines are in operation.
- (2) U.S. Samica Corporation shall operate the incineration control devices at a minimum temperature of 760°C (1400°F) while the respective process lines are in operation. Furthermore, U.S. Samica Corporation shall not process material in the process lines until such time as the respective incineration control device has reached a minimum temperature of 760°C (1400°F).
- (3) U.S. Samica Corporation shall discontinue operation of the Phase II line by May 31, 1995.

(4) EMISSION LIMITATIONS AND REDUCTIONS

U.S. Samica Corporation shall achieve an overall reduction in uncontrolled VOC emissions of at least 81% by weight from both the Wolverine and Midland-Ross lines. In the event the emission capture efficiency testing or demonstration required under condition (5)(b) of this Order is not completed by May 31, 1995, U.S. Samica Corporation shall design and operate the capture systems to continuously achieve a minimum capture efficiency of 85% by weight and shall also continuously achieve a minimum destruction efficiency from each incineration control device of 95% by weight until such time as the emission capture efficiency testing or demonstration is completed and compliance with the 81% by weight overall reduction can be determined.

(5) COMPLIANCE TESTING

- (a) U.S. Samica Corporation shall conduct VOC emission testing of the inlet to and outlet of each incineration control device at their Windcrest Road facility and shall furnish the Agency with a written report of the results of such testing by May 31, 1995. At least thirty (30) days prior to performing the testing required by this paragraph, U.S. Samica Corporation shall submit to the Agency a pre-test report prepared in accordance with the Agency's "Source Emission Testing Guidelines." The results of the emission testing required by this paragraph shall be used in conjunction with the capture efficiency testing or "permanent total enclosure" demonstration requirement in condition (5)(b) below in order to demonstrate compliance with the overall weight percent reduction in VOC emissions specified in condition (4) above.
- (b) In addition to the VOC emission testing in (5)(a) above, U.S. Samica Corporation shall also conduct emission capture efficiency testing on each capture system or demonstrate that the capture system is a "permanent total enclosure" and shall furnish the Agency with a written report of the results of such testing or demonstration within 180 days of issuance of final emission capture efficiency guidance procedures by the U.S. Environmental Protection Agency. At least thirty (30) days prior to performing the testing required by this paragraph, U.S. Samica Corporation shall submit to the Agency a pre-test report which describes the method that will be used to determine emission capture efficiency. The results of the capture efficiency testing or demonstration required by this paragraph shall be used in conjunction with the VOC emission testing requirement of condition (5)(a) above in order to demonstrate compliance with the overall weight percent reduction in VOC emissions specified in condition (4) above.

(6) CONTINUOUS MONITORING AND RECORDING SYSTEM

- (a) U.S. Samica Corporation shall continuously monitor and record for each subject incineration control device and process line the following:
- (i) exhaust gas temperature at the outlet of each incinerator; and
 - (ii) actual periods of start-up, operation, and shutdown of the respective process line and control device.

- (b) U.S. Samica Corporation shall operate and maintain each continuous temperature monitoring system (CTMS) continuously in accordance with the following:
- (i) All measuring devices and recording equipment for each CTMS shall be installed, operational, and the accuracy of the equipment verified before May 31, 1995.
 - (ii) Each CTMS must record valid data during all source operating times except for periods of established quality assurance and quality control procedures, preventative maintenance, or unavoidable malfunction. Nevertheless, the CTMS must record valid data for at least 90% of the source operating time within any quarter of the calendar year.
 - (iii) U.S. Samica Corporation shall develop, implement, and maintain for the monitoring and recording systems a Quality Assurance (QA) Plan which documents operations pursuant to the requirements of this Order. The QA Plan must be submitted to the Agency by March 1, 1995, and must be acceptable to and approved by the Agency prior to conducting the compliance testing required under condition (5) of this Order. The QA Plan shall specify the equipment, monitoring procedures, calibration and quarterly auditing and reporting procedures, and data recording systems to be used to demonstrate compliance with this Order. U.S. Samica Corporation shall review the QA Plan and all data generated by its implementation at least once each year. U.S. Samica Corporation shall revise and update the plan as necessary, based on the results of this review or upon the Agency's request. U.S. Samica Corporation shall notify the Agency in writing of the results of each review.
 - (iv) U.S. Samica Corporation shall submit a summary monitoring report for each calendar quarter, within thirty (30) days after the close of the quarter, to the Agency. The format and content of the quarterly report shall be identified in the QA Plan.
 - (v) After each CTMS is installed, U.S. Samica Corporation shall conduct an accuracy audit of the CTMS to initially verify its performance. This accuracy audit shall be performed each quarter thereafter. The CTMS must be demonstrated to be within $\pm 15^{\circ}\text{C}$ ($\pm 27^{\circ}\text{F}$) of a reference temperature measuring device. The reference measuring device shall have a certified accuracy of $\pm 1\%$ or better. The results of the quarterly audit will be included with the quarterly report required in (6)(b)(iv) above.
 - (vi) All temperature data shall be reported in degrees Fahrenheit and in 15-minute averages.

- (vii) U.S. Samica Corporation shall maintain a file of all information reported in the quarterly summaries and all raw data collected by the monitoring systems for at least five (5) years from the date of collection of such data or submission of such summaries. All data records for the monitoring systems shall be marked to show the times of both start-up and shutdown of the incineration systems and the process lines.

(7) NUISANCE AND ODOR

- (a) U.S. Samica Corporation shall not discharge, cause, suffer, allow or permit any emissions of objectionable odors beyond the property line of the facility.
- (b) U.S. Samica Corporation shall not discharge, cause, suffer, allow, or permit from any source whatsoever such quantities of air contaminants or other material which will cause injury, detriments, nuisance or annoyance to any considerable number of people or to the public or which endangers the comfort, repose, health or safety of any such persons or the public or which causes or has the tendency to cause injury or damage to business or property.

(8) MALFUNCTIONS

If a malfunction of any air pollution control system or other equipment occurs that would cause the U.S. Samica Corporation to operate in excess of any of the emission standards or operating limits contained in this Order, the unit(s) which would cause the exceedance shall be shut down immediately. The unit(s) shall remain shutdown until the malfunction has been identified and corrected.

(9) RECORDKEEPING AND REPORTING

- (a) Unless otherwise specified above, all records, reports, and notifications that are required to be submitted to the Agency by this Order shall be submitted to:

Field Services Section
Air Pollution Control Division
D.E.C., Agency of Natural Resources
Bldg. 3 South, 103 South Main Street
Waterbury, Vermont 05671-0402

- (b) All records shall be retained for a minimum period of five (5) years from the date of record and shall be made available to the Agency upon request.

EFFECTIVE DATE OF THIS ADMINISTRATIVE ORDER

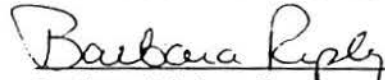
This Administrative Order shall become effective on the date it is received by U.S. Samica Corporation.

COMPLIANCE WITH THIS ADMINISTRATIVE ORDER

If U.S. Samica Corporation fails or refuses to comply with the conditions of this Administrative Order, the Secretary shall have cause to initiate an enforcement action against U.S. Samica Corporation pursuant to the provisions of 10 V.S.A. Chapters 201 and 211.

Dated this 4th day of January 1995, in the town of Waterbury, county of Washington, state of Vermont.

STATE OF VERMONT



Barbara Ripley, Secretary
Agency of Natural Resources