

IN THE MATTER OF:
KAYDON RING &
SEAL, INC.

BEFORE THE MARYLAND
DEPARTMENT OF THE
ENVIRONMENT

* * * * *

CONSENT ORDER

This CONSENT ORDER ("Order") is issued pursuant to the authority vested in the Maryland Department of the Environment ("Department") by Titles 1, 2, and 6 of the Environment Article of the Maryland Code and by the Code of Maryland Regulations (COMAR) 26.11 to regulate air pollution in the State of Maryland and to enforce State air pollution laws and regulations.

WHEREAS, Kaydon Ring & Seal, Inc. ("Kaydon") operates a piston ring manufacturing facility located at 1600 Wicomico Street in Baltimore which includes over 300 small machining and fabricating operations, e.g. cutting, grinding, milling, polishing and lapping operations (the "Facility");

WHEREAS, the machining and fabrication operations are distributed over 18 product manufacturing cells that often require several applications of a rust preventive material and several applications of naphtha as a cleaning agent;

WHEREAS, naphtha is a volatile organic compound (VOC), emissions of which are subject to State air pollution control laws and regulation;

WHEREAS, COMAR 26.11.19.02G requires the identification and implementation of reasonably available control technology (RACT) for all sources of VOCs at any facility with the potential to be a major source of VOCs;

WHEREAS, the Facility, with total uncontrolled VOC emissions in 1990 of approximately 100 tons, is a major source of VOCs;

WHEREAS, Kaydon, in accordance with COMAR 26.11.19.02G, conducted an analysis of available VOC control options for the Facility's naphtha system, and submitted a RACT proposal to the Department for consideration and approval;

WHEREAS, the Facility's manufacturing processes consist of hundreds of naphtha pans, located throughout the Facility's product manufacturing cells;

WHEREAS, Kaydon's RACT proposal included an evaluation of the cost effectiveness of add-on control devices such as thermal oxidizers and carbon adsorption systems, and concluded that the capture of VOC from the numerous small sources throughout the plant would not be practical or cost effective;

WHEREAS, Kaydon has investigated the use of alternative materials, including non-VOC materials, water-based materials and low vapor pressure materials for the facility's rust preventive and cleaning operations and concluded that none of the alternative materials investigated provided acceptable performance;

WHEREAS, Kaydon has identified and implemented the following VOC RACT measures in order to reduce naphtha emissions from the Facility:

- (1). Elimination of all small open top naphtha pans and reduction of the number of naphtha pans in use from more than 300 to approximately 220;
- (2). Development of standard operating procedures and employee training to increase the retention time of parts in the naphtha pans allowing all excess naphtha to drip back into the pans;
- (3). Development and implementation of written good operating practices for the handling, transfer, storage and recovery of naphtha;
- (4). Incorporation of the good operating practices into the Facility's procedures

manual;

- (5). Installation of properly sealed covers on all remaining naphtha pans and implementation of procedures to ensure that covers are closed on all naphtha pans which are not in use; and
- (6). Modification of its operations and relocation of the equipment in each product manufacturing cell to minimize the number of naphtha pans and the number of cleaning operations.

WHEREAS, the implementation of the VOC RACT plan has reduced naphtha emissions by approximately 20 tons per year or to less than 100 pounds per 1000 piston rings produced.

ORDER

NOW, THEREFORE, the Department hereby orders, and the Company hereby consents to the following terms and conditions:

A. Kaydon agrees to:

(1). Maintain compliance with the VOC RACT measures which have been implemented to date;

(2). No later than July 1, 2003, reduce the number of naphtha pans in use to not more than 185;

~~(3). No later than July 1, 2003, limit emissions of naphtha to a monthly average of not more than 90 pounds per 1000 piston rings manufactured. Compliance shall be demonstrated using actual monthly production of piston rings and a six month average naphtha use beginning with the 6-month period July 1, 2003 to December 31, 2003;~~

(4). Maintain, and update as necessary, the good operating practices included in the Facility's procedures manual and make the manual available to the Department for inspection upon request;

(5). Annually review the organization and layout of the product manufacturing cells and continue to investigate alternative materials for the Facility's rust preventive and cleaning operations;

(6). Maintain records on piston rings manufactured and naphtha use, and calculations showing that the requirement in item 3 was achieved. Make these records available for review by the Department upon request;

(7). Submit to the Department for approval following the execution of this Order a proposed format for piston ring production and naphtha consumption records; and

(8). Maintain the records required in item 6 on site for at least 5 years.

B. The provisions of this Order shall apply to and be binding upon Kaydon, its successors and assigns. Prior to the transfer by Kaydon of any legal or equitable interest in the Facility, Kaydon shall present a copy of this Order to the prospective successor-in-interest.

C. If Kaydon establishes to the Department's satisfaction that it has been delayed in the ~~implementation of any obligation under this Order by a Force Majeure Event, such as~~ an Act of God, fire, flood, strike, riot, catastrophe, or other cause beyond the control of Kaydon, then the Department shall extend the date(s) or time period(s) (for performance) specified in this Consent Order for such a period of time as allows compliance to be achieved as expeditiously as practicable after the delay excused pursuant to this paragraph. Any extension granted shall in no event exceed the period of delay caused by the Force Majeure Event. Force Majeure Events do not include (1) difficulties caused by reasonably foreseeable weather conditions which could have been overcome by best efforts; (2) increased cost of performance; or (3) changed economic circumstances. Kaydon will notify the Department, in writing, of any such causes or delay within five days after Kaydon becomes aware of the delay or anticipates the delay. The burden of establishing a Force Majeure Event shall rest with Kaydon.

D. This Consent Order shall not be construed to create any rights in persons other than the Department and Kaydon.

E. It is the intent of the parties that the provisions of the Order are severable and that, should any provisions be declared by a court of law to be invalid or unenforceable, the other provisions shall remain in effect to the maximum extent reasonable. The parties agree that this Consent Order shall be governed by and construed in accordance with Maryland law.

F. Nothing in this Consent Order shall be construed to relieve Kaydon of its obligation to comply with all applicable State environmental laws and regulations.

G. The Company acknowledges that a violation of this Order constitutes a violation of law for which the Department may seek penalties through appropriate administrative or judicial proceedings, and further acknowledges that the Department may compel compliance with this Order by commencing a civil proceeding in a court of appropriate jurisdiction.

This Consent Order is agreed to and the terms and conditions herein consented to:

KAYDON RING & SEAL, INCORPORATED

1/8/04

Arthur H. Ridler

Date

By: Arthur Ridler, Vice President

DEPARTMENT OF THE ENVIRONMENT

3/5/04

Thomas C. Snyder

Date

By: Thomas C. Snyder, Director
Air and Radiation Management Administration

Approved as to form and legal sufficiency this 3rd day of March, 2004.

Dale A. Smith
Assistant Attorney General

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