



State of Ohio Environmental Protection Agency

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August 21, 1995

**CERTIFIED MAIL**

Re: Final Findings & Orders  
for the new VOC limitations  
for various oils and for  
anti-galling material used  
at the Middletown Works

Mr. Carl Batliner  
Environmental Affairs Manager  
AK Steel Corporation  
1801 Crawford Street  
Middletown, Ohio 45043-0001

Dear Mr. Batliner:

Transmitted herewith are the Final Findings and Orders of the  
Director of the Ohio EPA concerning the above-referenced matter.

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations & Permit Section  
Division of Air Pollution Control

TGR/tms

xc: Carol Porter, PIC  
Steve Feldmann, Legal Section  
Jim Orlemann, DAPC  
Tom Kalman, DAPC  
Martin Joseph, DAPC  
Bill Juris, DAPC  
Harry Schwietering, HAMCO

BEFORE THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO E.P.A.

AUG 18 95

ENTERED DIRECTOR'S JOURNAL

In the Matter of:

AK Steel Corporation : Director's Final Findings  
1801 Crawford Street : and Orders  
Middletown, Ohio 45043-0001 :

**PREAMBLE**

It is hereby agreed by and among the parties hereto as follows:

**I. JURISDICTION**

These Director's Final Findings and Orders ("Orders") are issued to AK Steel Corporation ("AK Steel"), pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under section 3704.03 and 3745.01 of the Ohio Revised Code ("ORC").

**II. PARTIES**

These Orders shall apply to and be binding upon AK Steel and its officers, directors, agents, servants, employees, assigns and successors in interest.

**III. DEFINITIONS**

Unless otherwise stated, all terms used in these Orders shall have the same meaning as used in Chapter 3704 of the ORC and the regulations promulgated thereunder.

**IV. FINDINGS OF FACT**

The Director of the Ohio EPA has determined the following findings of fact:

1. AK Steel, formerly Armco Steel Company, L.P. ("Armco"), which is located at 1801 Crawford Street, Middletown (Butler County), Ohio, owns and operates a steel coil manufacturing facility. At this facility AK Steel applies four types of coatings to processed metal coils. The coatings applied are rolling oils, rust preventative oils, prelube oils, and anti-galling material. These coatings contain volatile organic compounds ("VOCs"), as defined in Ohio Administrative Code ("OAC") rule 3745-21-01(B)(6). None of the steel coating lines are governed by Control Technique Guidelines developed by the United States Environmental Protection Agency ("USEPA").

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By: [Signature]

Date: 8/21/95

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2. On December 21, 1992, Armco submitted a letter to the Ohio EPA which included a schedule for switching to a waterbased anti-galling coating. This schedule estimated that a switch to waterbased anti-galling coating would be completed by July 15, 1993. This letter also requested that the Ohio EPA revise rule 3745-21-09(OO) (2) to remove the requirement to install control equipment for the anti-galling coating operation.

3. On March 15, 1993, the Ohio EPA promulgated revisions to OAC rule 3745-21-09(OO). The revised rule specified three VOC coating content limits: 2.9 pounds per gallon, excluding water, for rolling oils; 1.1 pounds per gallon, excluding water, for rust preventative oils; and 6.4 pounds per gallon, excluding water, for anti-galling coating. This rule was submitted to the USEPA as a revision to the Ohio SIP on June 7, 1993. VOC content compliance was to be determined based on ASTM D 2369-81, as prescribed in Method 24, 40 CFR part 60 Appendix A.

4. In the Federal Register of May 9, 1994, the USEPA issued a final action on Ohio EPA's SIP submittal of June 9, 1988. In this action, the 6.4 pounds per gallon VOC content limit for the anti-galling coating was disapproved based on (a) USEPA's contention that the VOC content limit was inconsistent with RACT and (b) the lack of a demonstration showing that a lower VOC content coating was unavailable.

5. On November 14, 1994, pursuant to the CAAA of 1990, the Ohio EPA submitted a formal request to the USEPA to redesignate Butler County from a nonattainment area to an attainment area for the National Ambient Air Quality Standard ("NAAQS") for ozone.

6. On April 5, 1995, the USEPA, Region 5 issued a letter to the Ohio EPA informing it of a few deficiencies in OAC rule 3745-21-09(OO). These deficiencies included a lack of technical support for the proposed 6.4 pounds of VOC per gallon limit for the anti-galling coating and failure to provide a revised RACT study to evaluate the cost-effectiveness of control equipment for the anti-galling coating operation. USEPA's letter requested current figures on the quantity of all oils used at AK Steel's facility and a list of the sources that have been removed since the company's 1988 RACT study was submitted. The USEPA informed the Ohio EPA that the redesignation request for Butler County could not be approved until all of the VOC emission control requirements in OAC Chapter 3745-21 were federally approved.

7. On May 23, 1995, AK Steel submitted to the Ohio EPA a table providing the number of gallons of each oil purchased, applied, and reclaimed in calendar year 1994 at its facility. AK Steel also submitted a RACT review concerning the feasibility of controlling the VOC emissions from its steel coating operations. AK Steel's RACT review showed that the installation of control equipment for VOC emissions from its metal coil coating operations is not economically reasonable (control cost is >\$6,300/ton of VOC removed). AK Steel requested revised VOC

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coating content limits for its metal coating operations. The following VOC coating content limits were proposed:

OAC rule 3745-21-09(OO)(1): The VOC content of any rolling oil employed at the facility shall not exceed 6.9 pounds of VOC per gallon of oil, excluding water and exempt solvents.

OAC rule 3745-21-09(OO)(2): The VOC content of any rust preventative oil employed at the facility shall not exceed 3.3 pounds of VOC per gallon of oil, excluding water and exempt solvents.

OAC rule 3745-21-09(OO)(3): The VOC content of any prelube oil employed at the facility shall not exceed 0.8 pounds of VOC per gallon of oil, excluding water and exempt solvents.

OAC rule 3745-21-09(OO)(4): The VOC content of any anti-galling material employed at the facility shall not exceed 1.2 pounds of VOC per gallon of coating.

The Ohio EPA agrees with AK Steel that the above-mentioned VOC content limits represent RACT for metal coil coating operations at the Middletown facility. The actual VOC emissions from the oils employed in these coating operations will be lower than the VOC emissions calculated using USEPA Method 24 for VOC content because the maximum oil processing temperatures during coating application are significantly lower than the Method 24 test temperature and for a significantly shorter period of time. Although the VOC coating content limits specified above are different from those specified in OAC rule 3745-21-09(OO)(1) through (OO)(3), the Ohio EPA finds that the limits specified above will not result in an increase in actual VOC emissions from AK Steel's metal coil coating operations at the Middletown facility.

8. On May 31, 1995, AK Steel also submitted to the Ohio EPA a list of sources that were identified in the company's 1988 RACT study, but have since been retired, dismantled, and/or removed.

9. In order to obtain USEPA approval of the revised VOC rules and expedite the approval of the redesignation request, the Ohio EPA is using these Orders to require AK Steel to meet the VOC content limits in Finding 7, with the understanding that a State rule change will follow at a later date.

10. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and their relation to benefits to the people of the State to be derived from such compliance.

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By: \_\_\_\_\_ Date: \_\_\_\_\_

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## V. ORDERS

The Director hereby makes the following Orders:

1. Upon the effective date of these Orders and in lieu of the requirements in OAC rule 3745-21-09(00)(1) through (00)(3), AK Steel shall comply with the VOC content limits specified in Finding 7 of these Orders, for the rolling oils, rust preventative oils, prelube oils, and anti-galling material. The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and U.S. EPA Method 24.

2. Pursuant to OAC rule 3745-21-09(B)(3)(f), AK Steel shall collect and record the following information each month and maintain the information at the facility for a period of three years:

- a) the total volume of rolling oil, rust preventative oil, prelube oil, and/or anti-galling coating employed at the Middletown facility, and
- b) the mass of VOC per volume of each coating, as applied at the Middletown facility.

3. Pursuant to OAC rule 3745-21-09(B)(3)(g), AK Steel shall notify the Ohio EPA of any monthly record showing the use of noncomplying coatings. This notification shall be submitted to:

Hamilton County  
Department of Environmental Services  
Attn: Harry Schwietering  
1632 Central Parkway  
Cincinnati, Ohio 45210

## VI. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. Nothing in these Orders shall be construed as waiving or compromising in any way the applicability and enforcement of any other statutes or regulations applicable to AK Steel's facility.

## VII. TERMINATION

These Orders shall terminate upon the effective date of any USEPA approval of an Ohio EPA request for a revision to the SIP for ozone that incorporates the VOC emission control requirements prescribed in Finding 7 within OAC Chapter 3745-21.

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By: [Signature] Date 8/18/95

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VIII. SIGNATORIES

Each undersigned representative of a signatory to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such signatory to this document.

IX. WAIVER

AK Steel agrees that these Orders are lawful and reasonable and AK Steel agrees to comply with these Orders.

AK Steel hereby waives the right to appeal the issuance, terms and service of these Orders and it hereby waives any and all rights it might have to seek judicial review of these Orders either in law or equity.

Notwithstanding the preceding, the Ohio EPA and AK Steel agree that in the event that these Orders are appealed by any other party to the Environmental Board of Review, or any court, AK Steel retains the right to intervene and participate in such appeal. In such event, AK Steel shall continue to comply with these Orders unless said Orders are stayed, vacated, or modified.

IT IS SO ORDERED AND AGREED:

AK Steel Corporation

David C. Wise  
By

Date August 7, 1995

Acting General Manager - Manufacturing  
Title

Ohio Environmental Protection Agency

Donald R. Schregardus  
Donald R. Schregardus  
Director

AUG 18 1995  
Date

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: [Signature] Date: 8/21/95

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